

NATIONAL ORTHOPAEDIC HOSPITAL CAPPAGH

Annual Report 2020

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National Orthopaedic Hospital Cappagh

At the forefront of orthopaedic medicine, education and innovation, the National Orthopaedic Hospital Cappagh has the highest concentration of orthopaedic expertise in Ireland. Here we bring together our consultant body's skills, knowledge, and subspecialty proficiency to deliver cutting-edge treatments.

A national service for the people of Ireland

We serve the people of Ireland, providing a national orthopaedic service to treat congenital, acquired, and degenerative musculoskeletal conditions. We treat patients of all ages and from all walks of life.

The Hospital is home to the National Patient Referral Centre for Primary Bone & Soft Tissue Tumours and is the Dedicated Orthopaedic Oncology Surgical Centre for the National Sarcoma Service. We collaborate with Children's Health Ireland (CHI) as a centre for Elective Paediatric Orthopaedic surgery. We are also home to the National Bone Bank and offer Rheumatology, Sports & Exercise Medicine and Rehabilitation Services.

Touching lives

Patient well-being is central to the Hospital's strategy and operations. We are committed to improving access to care for people with orthopaedic conditions, alleviating pain, improving mobility and function, and restoring quality of life. Caring is in our DNA, and it is our privilege to be able to help others.

Driving innovation for improved patient outcomes

Since its establishment in 1908, the Hospital has pioneered many firsts that have revolutionised the Irish medical landscape. We performed the first total hip replacement surgery in Ireland in 1969, and more recently, in 2018, we introduced same-day discharge for patients undergoing total hip replacement surgery. Furthermore, we were the first Irish hospital to successfully implement a two-surgeon approach to scoliosis surgery, reducing theatre time and national scoliosis waiting lists, and improving patient outcomes.

Empowering students to deliver premium healthcare

We set high educational standards for students, doctors, nurses and allied healthcare professionals, fostering a culture of curiosity and continuous learning. Our role as an educator is to impart the necessary skills and knowledge, empowering students to deliver premium healthcare and drive positive change through research and innovation. Our reputation for medical and educational excellence attracts talented students worldwide to train at the Hospital. They are the future of orthopaedic medicine, and we ensure they receive a solid foundation for a successful career. We hope their time with us will inspire them to greatness and equip them with the skills and knowledge to transform lives for the better.



A member of the Ireland East Hospital Group

Ireland East HOSPITAL GROUP



Research and academic partners

RCSI

NUI Galway
OÉ Gaillimh

DCU

Royal College of Physicians of Ireland

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

University College Dublin
Ireland's Global University

University of Limerick
Ollscoil Luimnigh

University of Strathclyde Glasgow

Maynooth University
National University of Ireland Maynooth

IITOS
The Irish Institute of Trauma and Orthopaedic Surgery

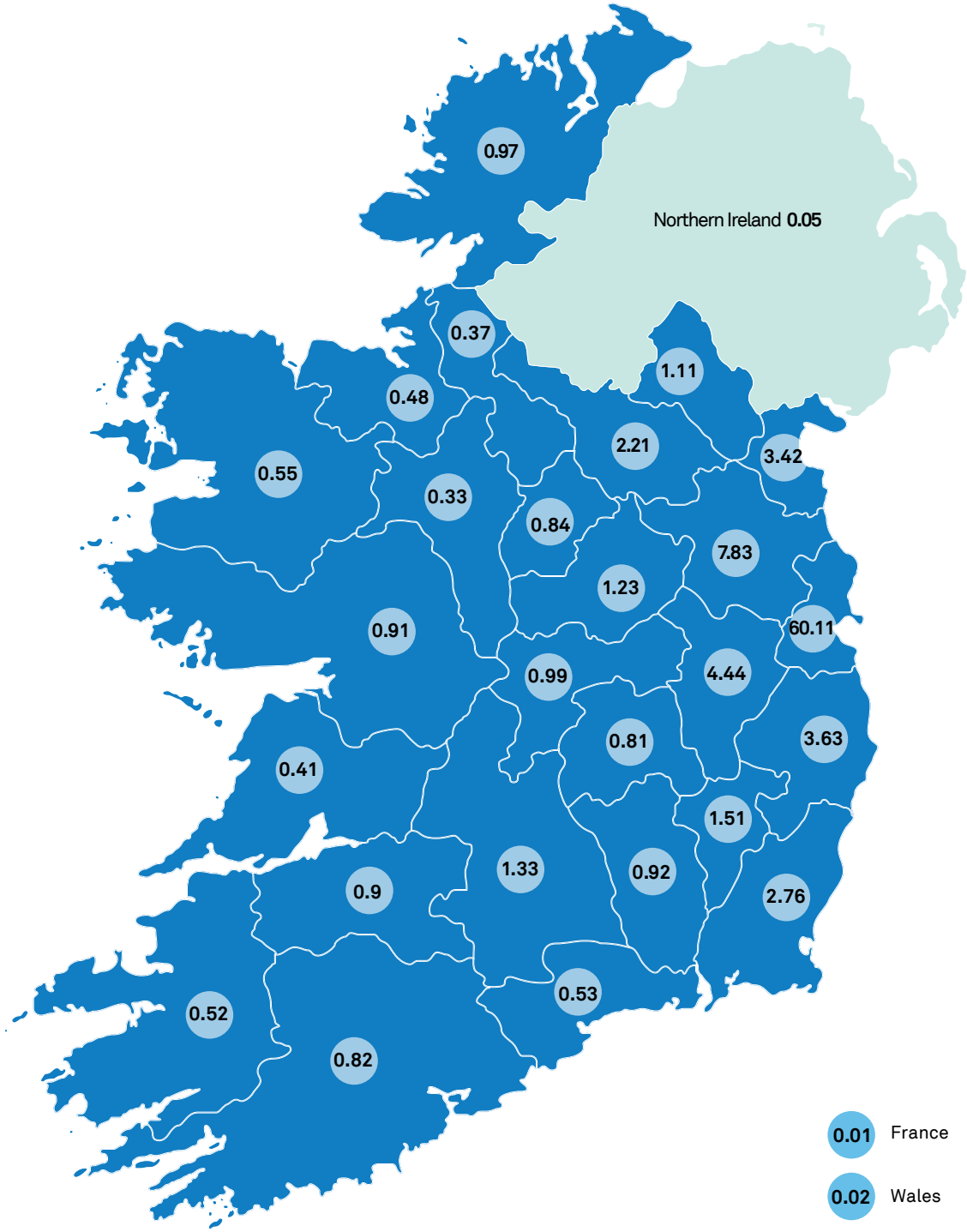
CAI
Salus Dum Vigilamus

RCSI Faculty of Radiologists

Patient Demographics

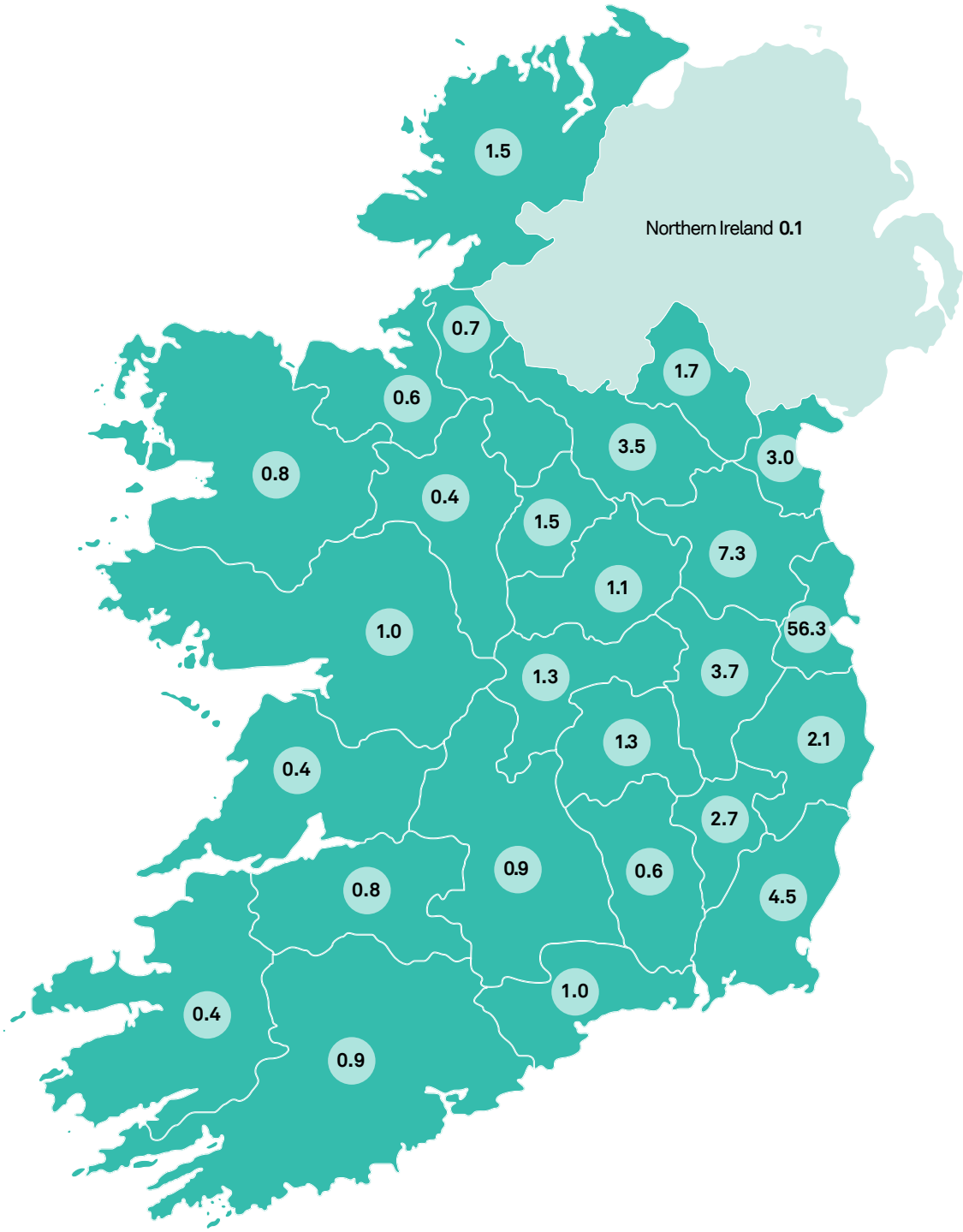
Inpatient percentage

Area of residence



Outpatient percentage

Area of residence



Facts & Figures

Outpatient clinic

Outpatient attendees
14,439

Pre-operative assessment clinic attendees & telephone triage
6,648

Joint register clinic attendees
4,697

Department of paediatric medicine outpatient attendees
400

Inpatient discharges

Overall discharges
3,188

Orthopaedic discharges
2,981

Rehabilitation patient discharges
207

Paediatric patient discharge
89

Average length of stay

Orthopaedic patients
3.3 days

Paediatric patients
3.08 days

Day surgery

Day cases
7,774

Paediatric day cases
156

Plaster bay attendees
3,052

Diagnostics - radiology & pathology

Radiological examinations
20,043

Interventional radiological procedures
1,765

MRI scans
4,509

Dexa scans
375

Pathology laboratory testing
147,415

Theatre

Surgical procedures
3,478

Total hip replacement & revision surgeries
771

Total knee replacement & revision surgeries
706

Paediatric patients (0-16 years)

Surgical procedures
144

Spinal surgeries
15

Hip surgeries
24

Other surgeries
99

Waiting lists at 31 December 2020

Awaiting inpatient and day case admission
2,567

Awaiting outpatient appointments
2,543
Patients waiting for total

hip replacement surgery
465
Patients waiting for total

knee replacement surgery
408

Chairman's Statement

It has been an extraordinary year by any standards and 2020 will live long in the memory for all the wrong reasons! Words of thanks from me may seem hollow (because of Covid-19, I was not able to get out to the Hospital and meet with you all and introduce myself) but I do thank each and every one for your heroic and selfless service on behalf of the patients at the Hospital during what has been an unbelievably difficult and challenging time. During Covid-19, the Hospital demonstrated exemplary flexibility and co-operation so as to be a part of the national effort in combatting and dealing with a dangerous and, sadly at times, deadly virus. A number of staff contracted the virus in trying to help others and we should never, ever forget that. "Front line workers" became the new catch phrase and how apt and real that is. To say that we owe them a huge debt of gratitude is to grossly understate the position.

Mr John Wilkinson (my predecessor as Chairperson) resigned in September 2020 after countless years of diligent and unwavering dedication to the Hospital, its staff and patients. For John's contribution, we are deeply grateful. Ms Michele Jackson joined the Board at the same time and she brings to the table (among other things) super energy, expertise and enthusiasm for the role. To the members of the Board, I thank them for their continued hard work, support and astute guidance.

Mr Connor Green and his team continue to develop Cappagh Kids and provide much needed care for our paediatric patients. While, of course, the adult orthopaedic surgery and care is the raison d'etre and backbone of our Hospital (expertly lead by the Chair of the Medical Board, Mr Paul Curtin), Cappagh Kids is an exciting, much needed and welcome addition to the healthcare services provided by the Hospital.

The Hospital, as you will all be well aware, is run with great efficiency and effectiveness by Ms Angela Lee and her senior management team. Notwithstanding that, the team has great empathy with all of those who work in, or who are patients at, the Hospital so that everyone feels part of the team and family that is NOHC. They are a great credit to themselves and a pleasure to work with.

During 2020, Ms Aoife Gallagher was promoted to Chief Operations Officer (COO) of the Hospital and we wish her every success in her new role. It is a thoroughly deserved promotion. As with all organisations, a number of staff retired during the year. We thank them most sincerely for their contribution to the Hospital and look forward to catching up with them at social events in the years ahead.

Exciting things are happening on the campus in terms of upgrading our existing facilities and while it is never enough, it is a start and we will keep at it until we have an infrastructure that is modern, environmentally friendly and suitable for the world class surgeons, doctors, nurses and staff that we are so very fortunate to have and, of course, for the patients (children and adults) that are treated at the Hospital.

Thank you all again for your steadfast commitment and the unrelenting hard work that you do on behalf of the Hospital and its patients. The future is bright for NOHC and that is down primarily to each and every one of you which I, for one, am extremely grateful.

Colin Byrne
Chairperson



CEO's Statement



The 2020 Annual Report celebrates the people who have shown resilience, commitment, courage and compassion in extraordinary times. It's a celebration of our staff, who, despite the considerable challenges of the Covid-19 pandemic, ensured the National Orthopaedic Hospital Cappagh continued to be a great place to receive care. I would like to extend my heartfelt thanks to staff members for their professionalism and dedication and for the many personal sacrifices they made and continue to make each day to ensure the safety of patients and colleagues. In addition, I would like to pay tribute to the families and friends who supported our people, offering essential childcare services at the height of the pandemic so our staff could come to work.

This report is a celebration of the patients who entrusted us with their care when they were at their most vulnerable and during an uncertain time. I would also like to acknowledge their families, who demonstrated patience, understanding, fortitude, and trust from afar. I wish to recognise the support we received from the Health Service Executive (HSE), Ireland East Hospital Group (IEHG) and National Treatment Purchase Fund (NTPF), who collaborated to ensure essential access to care for patients. Furthermore, I am grateful to our suppliers and community members for their practical support at the height of the pandemic.

This report provides a mere glimpse of the immense efforts undertaken by the National Orthopaedic Hospital Cappagh community to overcome the challenges of Covid-19 for the delivery of continuous, safe, effective, and empathic care.

Strategic highlights

2020 marked the last year of our 3-year strategic plan 2018-2020, and I'm delighted to report the Hospital successfully delivered on its strategic goals despite the impact of Covid-19.

Helping patients to access the care they need

Over the past three years, activity increased across all stages of care. For example, surgical activity rose by 16.2%, and day-case surgeries increased by 8% in the period. In addition, plaster bay attendees increased by 18%, and the average length of stay for orthopaedic patients reduced from 3.75 days to 3.3 days. These considerable achievements contribute to shorter waiting lists and expedited care for patients.

Successful launch of a new name and brand identity

On 11 February 2020, we hosted and live-streamed the unveiling of the Hospital's new name and brand identity at an event titled "Enhancing Patient Outcomes Through Practice Innovations". I was privileged to assume the role of moderator and guest speaker for the evening was Mr. Paul Reid, CEO of the HSE. In addition, members of the Hospital's Consultant Panel presented on their specialist field, informing attendees and online audiences from the GP community of the many services, practices and innovations unique to the Hospital. The event was CPD accredited and provided the Hospital with the opportunity to showcase our new brand, video and website.

Improved clinical engagement and governance

Enhanced clinical engagement and governance was a key priority of the 2018-2020 strategy. As Covid-19 took the country in its grips, the importance of collaboration between the clinical and non-clinical leaders was essential to operational continuity and the provision of safe care. Greater communication and engagement between the Clinical Director, Medical Board and Executive Management Team and decisive leadership facilitated an agile and coordinated response to the pandemic.



John Wilkinson, Chairperson NOHC, Anglela Lee, CEO NOHC and Paul Reid, CEO HSE at the launch of the new name and brand identity for the National Orthopaedic Hospital Cappagh (NOHC) on 11 February 2020.

Improving the physical and digital environment

Significant infrastructural progress was achieved over the course of the strategy. A new Admissions building adjacent to the main hospital entrance opened in 2020. This new facility enhances the patient's physical journey and hospital experience.

Works are well progressed on refurbishing the main convent building and annexe, which will become the new home for the Cappagh Kids' Outpatient Clinic and the Professorial Unit. This project will deliver a welcoming space where our young patients can receive care as well as an improved educational facility where medical and surgical students can learn and excel. Work is expected to be complete in Q1 2022.

Extensive plans to increase the Radiology Department capacity and capability progressed. Planned projects include refurbishing the x-ray room and equipment upgrade, installing a new MRI and CT scanner, and introducing a new mobile C-arm to the Department.

CEO's Statement continued

In January 2021, we presented ambitious plans to develop a new High Dependency Unit (HDU), a 76-bed ward block and additional operating theatres to the HSE for consideration. At the time of writing, discussions are ongoing concerning funding for this major development, which would significantly increase the Hospital's surgical capacity and greatly assist in reducing national waiting times for orthopaedic surgery.

We undertook a review of the hospitals IT infrastructure, and work continues on system augmentations and upgrades. The Hospital also piloted a new HSE analytical tool and collaborated with other external providers to enhance our data analytics capability.

Committed to innovation and academic excellence

The National Orthopaedic Hospital Cappagh encourages and supports research. We foster a learning culture, leading and participating in world-class research and innovation, and I am pleased to confirm that the Research & Ethics Committee received 58 Research applications from the period 2018-2020.

Hospital activity in 2020

The year began with great energy and enthusiasm. In January and February, we scheduled additional Pre-operative Assessment Clinics increasing surgical throughput to assist the National Treatment Purchase Fund's efforts reducing patient waiting lists. However, as we prepared for the brand launch in February 2020, Covid-19 was beginning to cast its dark shadow over Europe. In mid-March, the Executive Management Team and the Medical Board unanimously agreed to suspend all non-essential elective surgical procedures and outpatient appointments and begin the temporary transition to the provision of trauma services. Almost immediately, we began accepting patients who would ordinarily receive treatment in the major acute hospitals, freeing up capacity and resources for the treatment of Covid-19 patients. We continued to provide a trauma and plastics service until July 2020, when we resumed elective orthopaedic surgery. Mindful of viral recrudescence, NOHC maintained a high level of preparedness in the intervening months, returning to trauma services in early 2021 as the major acute hospitals again experienced a surge in Covid-19 admissions.

Ensuring access to care in a COVID-19 climate

The Covid-19 pandemic has driven rapid innovations, accelerating virtual and telehealth consultations at the Hospital. New technologies were mobilised at speed, negating physical distancing limitations and overcoming travel restrictions to connect patients with care.

During 2020, we continued to improve access to care for patients. Although non-essential elective orthopaedic surgery and outpatient appointments were suspended for a period, surgical activity increased by 3%. In addition, a fifth surgical theatre operated at peak times, and the Hospital exceeded the HSE surgical targets for the year.

Day case activity grew by 29% for the year. December 2020 waiting lists were similar to those of 2019, with 2,567 patients awaiting inpatient and day-case admission and 2,543 patients awaiting a first outpatient clinic appointment. The Hospital has been experiencing a year-on-year increase in demand for services. I believe that many people deferred treatment in 2020 because of Covid-19 related fears, and I expect the 2021 waiting list will increase as the vaccine rollout gains momentum and patient's confidence restores.

Commitment to the provision of quality care

Despite intense operational pressure, staff demonstrated extraordinary skill, dedication and personal sacrifice to ensure the continuity of service and delivery of exceptional care. Although the Health Information and Quality Authority annual National Patient Experience Survey did not take place in 2020, I am delighted to report that we received excellent feedback from patients attesting to the high standards of care at the Hospital. (page 30)

Keeping patients and staff safe during the crisis and beyond

Despite taking every precaution to protect patients and staff and prevent the spread of Covid-19, the Hospital experienced high levels of Covid-related absenteeism resulting from positive cases and close contacts. At the height of the crisis, 17.85% of the Hospital's workforce was absent, and 69 staff tested positive for Covid-19, placing enormous pressure on the remaining staff to perform essential tasks. Mindful of the long-term implications of Covid-19, we are proactively looking for ways to enhance staff support and protection into the future.

Gaining recognition for our work

I am delighted to report the Hospital received a First Commendation in the Irish Healthcare Awards 2020 for the best response to Covid-19 in the Public Hospital category.



Managing budgets and meeting patient's needs

One of our most significant challenges continues to be balancing the needs of patients against available funding. Notwithstanding the challenges in 2020, we exercised prudent spending and reported a small deficit in the year.

Outlook

The Hospital is committed to expanding its service capacity and capability, thus providing timely and effective care to more patients. The progression of the proposed development (for a new HDU, ward block and three additional theatres) would enable the Hospital to double its current volume of surgical procedures. In line with Slaintecare recommendations, this would have an immediate impact on NOHC's waiting lists, support the transfer of orthopaedic patients from other sites and reduce national waiting times.

I look forward to pursuing the development potential of the campus and improving sustainable practices to protect the environment. We have made great progress leveraging technological innovations to extend our national reach, and the Hospital will build on this in the future.

Conclusion

During the year, Mr John Wilkinson, Chairperson of the Board, retired after eleven years of service to the Hospital and three as Chairperson. I would like to thank Mr Wilkinson for his service and commitment to the Hospital over the years. He was succeeded by Mr Colin Byrne who took over as Chairperson in October. During the year we also welcomed Ms Michele Jackson to the Board.

In 2020, our colleague, friend and fellow board member, Ms Kathy O'Sullivan, informed me of her intention to retire as Director of Nursing in early 2021. Mr Peter Keogh, Consultant Orthopaedic Surgeon, also stepped down from his role as Clinical Director following his three-year tenure which concluded at the end of the year and Dr Geraldine O'Leary, Consultant Anaesthetist and Honorary Secretary of the Medical Board announced her intention to retire in early 2021. All three were highly valued members of the Executive Management Team, and I would like to acknowledge their exemplary service to the National Orthopaedic Hospital Cappagh over many years.

In March 2020, Ms Aoife Gallagher took up the new role of Chief Operations Officer in the Hospital. Aoife previously held the position of Director of Human Resources and Operations.

I wish to express my sincere gratitude to the Board of Directors, the Clinical Director, the Executive Management Team, the Medical Board, and staff across all disciplines for their help, guidance, and unwavering support throughout the year.

In 2020, Prof Mary Day left her position as CEO of the Ireland East Hospital Group (IEHG) and was succeeded by Mr Declan Lyons in July 2020. I would like to thank Professor Day, Mr Lyons, and the team in IEHG, the HSE and NTPF for their continued support throughout 2020.

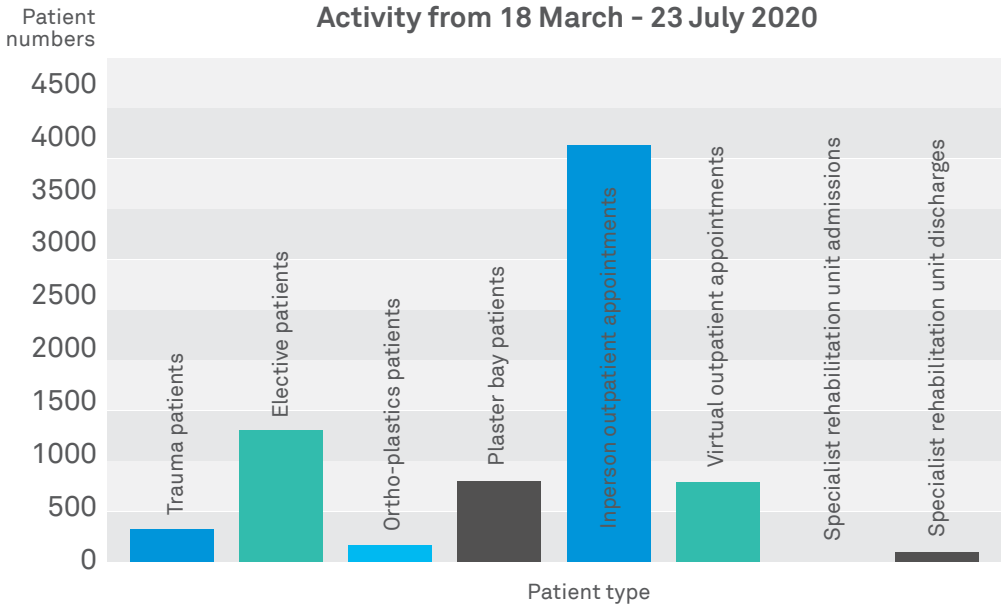
I look forward to working with the Board, the Executive Management Team, the Medical Board, and our Staff to further develop the Hospital and expand its services. Our primary ambition for 2021 is to build on what we do well, encourage innovation and further enhance our patient's experience, thereby consolidating our position as a Centre of Excellence in the provision of orthopaedic services.

Angela Lee
Chief Executive Officer



Responding to the threat of Covid-19

The National Orthopaedic Hospital Cappagh is a tertiary referral centre. We plan patient appointments and surgical lists to precision, performing in excess of 100 day-case and 65 overnight surgical procedures weekly. Currently, five of the Hospital's surgical theatres are in active use, with a minor theatre also operational. On 13 March 2020, as the country braced itself for the impact of Covid-19, an emergency meeting of key executives and the Medical Board convened at the Hospital. Those in attendance unanimously agreed to suspend all non-essential procedures and outpatient clinics and transition to trauma services for the first time since the Hospital opened its doors in 1908. The Hospital's primary objective was to alleviate pressures on the major acute hospitals and ensure that patients continued to receive vital care in a safe environment.



Transition to trauma service

The transition to trauma services began with the appointment of trauma leads Prof. John O'Byrne, Head of the Professorial Unit, Mr Paul Curtin, Chair of the Medical Board, and Mr Peter Keogh, Clinical Director at the Hospital. Drawing from their extensive experience in trauma, they undertook an analysis of the patient journey and touchpoints, and invited staff from relevant disciplines to co-create a solution for the Hospital's successful transition to trauma services.

Working with referring hospitals

The Senior Management Executive and Medical Board recognised that disparate admission, screening, and referral protocols at referring hospitals presented a challenge from the outset.

A new trauma pathway algorithm was formulated through the inter-disciplinary collaboration of orthopaedic surgeons, anaesthetists, medical physicians, nursing and support staff. Taking inspiration from national and international guidance, this iterative pathway governed all patient journey stages from referral to post-discharge patient care. It was regularly adapted to reflect stakeholder feedback, emerging evidence, and best practice.

Clear communication was central to the safe, effective and efficient treatment of patients. To this end, we provided referring hospitals with:

- new protocols for patient screening
- a referral form eliciting optimal information to facilitate appropriate planning and,
- electronic patient information packs for dissemination to patients referred, communicating precautions to be taken in advance of admission and the admissions process, and providing details of pertinent imaging, documentation and medications to bring on the day of admission

Referring Consultants used Siilo, the secure medical messaging App, to collaborate and exchange real-time patient data with NOHC Consultant Orthopaedic Surgeons and visiting Ortho-plastic Consultants were granted temporary operating privileges at the Hospital.

Ensuring staff and patient safety

Maintaining a Covid-19-free environment was paramount to patient and staff safety and service continuity. For this reason, we immediately imposed visitor restrictions, introducing stringent admission protocols and staff directives to prevent viral infiltration of the Hospital. Patients for admission undertook risk assessment and Covid-testing at referral sites where possible. In the absence of risk assessments and Covid-19 test results, patients were presumed to be infected until proven otherwise, and appropriate safety measures were taken in the delivery of care.

Approach to surgery

Spinal and regional anaesthetics were administered where possible to reduce the risk to anaesthetists, improve post-operative patient mobilisation and expedite discharge.

Surgical teams were divided into pods and assigned different colour-coded scrubs to identify their pods. Separate changing rooms and toilet facilities were allocated to each pod reducing the prospect of cross-contamination in the event of infection and lessen the virus's impact, should a team member fall ill or be in close contact with a Covid-19 positive case. Trauma huddles convened each morning to discuss patients for surgery and in the evening to review challenges, share successes, and prepare for the following day.

Resource management

High-risk staff members were redeployed from frontline positions, and agile rostering and agency staff were employed to ensure sufficient resourcing for the provision of quality patient care. Contact tracing was implemented, and occupational health services were made available to staff on sick leave, in recovery and returning to work post-infection. Staff at the Hospital worked tirelessly with the HSE and independently to source adequate Personal Protective Equipment (PPE) supplies for patient and staff safety. Staff in referring hospitals were most helpful, providing essential equipment, theatre sets and trauma-specific training. To reduce the risk of infection, we placed greater emphasis on day case procedures and expedited discharge. Post-operative patients were evaluated on a case-by-case basis to determine if an in-person or virtual outpatient appointment was necessary post-discharge, and comprehensive care plans were given to all patients on discharge from the Hospital.

Patient care

In the period from 18 March to 18 July, whilst operating as a trauma centre, 341 trauma, 1,289 essential elective orthopaedic, and 191 ortho-plastic procedures were performed at the Hospital and 805 patients received treatment in the plaster bay.

Contrary to standard work practices at the Hospital, staff were placed on call 24/7 and surgical theatres operated seven days a week for extended periods. The Outpatient Department held in-person consultations for 3,934 patients (1,075 new patients/2,859 patients for review appointments). Also, 825 patients attended Virtual Outpatient Clinics (453 new patients/372 patients for review appointments). The Specialist Rehabilitation Unit at the Hospital welcomed 65 new patients (17 < 65 years; 48 > 65 years) and discharged 112 patients from the unit in this period. Resourcing was perhaps the most significant challenge presented by the pandemic, as staff were precluded from service because of ill health or close contact exposure.

Outcomes

Inter-hospital co-operation ensured the seamless patient transition from acute referral hospitals to our care. Our staff's collaborative efforts ensured the safe and efficient co-ordination of the patient journey with appropriate screening, referral, anaesthesia, subspeciality surgical expertise, postoperative therapeutics, and care plans. The Hospital demonstrated an agile and adaptive response to the need for rapid change, enhancing cross-departmental and interdisciplinary collaboration. Safe practice checks ensured the transition to trauma was seamless for staff and patients.

Most patients did not require an outpatient appointment post-discharge, and few post-operative complications arose, bearing testament to the postoperative success of patient care plans. The efficacy of discharge care plans was further evidenced by the fact that no post-discharge surgical site infections were reported.

The Hospital remains committed to playing a crucial role in patient care in times of crisis. We will apply learnings from this experience to inform future operations, enhance patient care and enable an agile response to future demands.



Management Structure

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Corporate Governance

The National Orthopaedic Hospital Cappagh Designated Activity Company ("the Hospital" or NOHC) is a Designated Activity Company (limited by shares) and a voluntary hospital. The Company is a wholly owned subsidiary of Mater Misericordiae and the Children's University Hospitals Company (MMCUH), a company limited by guarantee. The majority of the members of MMCUH are Sisters of Mercy. The Company has been granted charitable status by the Revenue Commissioners. The Company operates the National Orthopaedic Hospital at Cappagh Road, Finglas, Dublin 11. It is one of eleven hospitals in the Ireland East Hospital Group (IEHG).

The National Orthopaedic Hospital Cappagh is a Designated Activity Company (DAC) - Company Registration No. 396993, and a Registered Charity - Registered Charity No (RCN). 20058685.



Board of Directors

The Board of Directors are responsible for the overall control and management of the Hospital. The Board delegates the management of the day-to-day operations of the Hospital and the implementation of Board policy and strategy to the Chief Executive.

The Board met on six occasions in 2020.

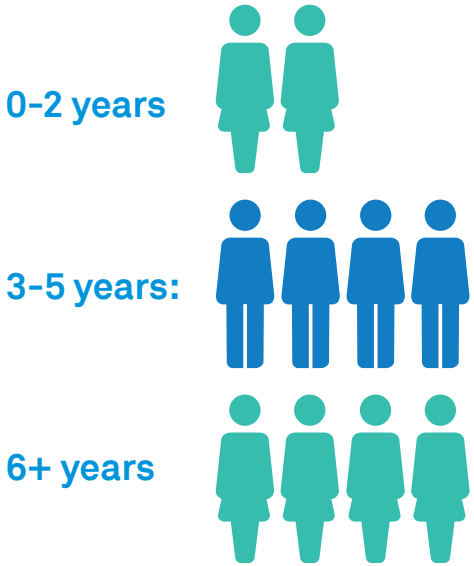
Mr Colin Byrne replaced Mr John Wilkinson as Chairperson of the Board on 22.10.2020. Ms Michele Jackson joined the Board on 29.07.20 as a Non-Executive Director.

As of 31.12.2020, the Board of Directors comprised ten members, three of whom are Ex-Officio members and seven Non-Executive Directors.

Gender balance



Board Members' tenure



Members of the Board of Directors as at 31.12.2020

Mr Colin Byrne
Chairperson

Appointed to the Board 21.02.2017
Member of the Finance and Audit Committee

Mr Shane Deasy
Vice-Chairperson

Appointed to the Board 21.02.2107
Member of the Finance Committee

Ex-Officio members

Ms Angela Lee
CEO

Appointed to the Board 21.02.2011
Chairs numerous Hospital Committees

Mr Paul Curtin
Consultant Orthopaedic Surgeon

Appointed to the Board 01.08.2018
Chairperson of the Medical Board

Ms Kathy O'Sullivan
Director of Nursing

Appointed to the Board 11.09.2007
(ceased employment in 2021 and resigned from the Board on 15.02.21)

Non-Executive Directors

Ms Eve Linders
Non-Executive Director

Appointed to the Board 21.02.2006
Chairperson of the Patient Care and Mission Committee

Sr Shiela Cronin
Non-Executive Director

Appointed to the Board 21.02.2006
Chairperson of the Clinical Governance & Clinic Risk Committee

Dr Declan Herbert
Non-Executive Director

Appointed to the Board 11.12.2018

Ms Maribé Fallon
Non-Executive Director

Appointed to the Board 12.09.2019

Ms Michele Jackson
Non-Executive Director

Appointed to the Board 29.02.2020

Board Member	Board Meeting 18.02.20 In person	Board Meeting 27.05.20 Zoom	Board Meeting 29.07.20 Zoom and in person	Board Meeting 30.09.20 Zoom and in person	Board Meeting 11.11.20 Zoom and in person	Board Meeting 16.12.20 Zoom and in person	Total number of Board meetings attended in 2020
Mr John Wilkinson	✔	✔	✔				3
Mr Colin Byrne	✔	✔	✔	✔	✔	✔	6
Mr Shane Deasy	✘	✘	✔	✔	✔	✔	4
Ms Angela Lee	✔	✔	✔	✔	✔	✔	6
Mr Paul Curtin	✔	✔	✔	✔	✔	✘	5
Ms Kathy O'Sullivan	✔	✔	✔	✔	✔	✘	5
Ms Eve Linders	✔	✔	✔	✔	✔	✔	6
Sr Sheila Cronin	✘	✔	✔	✔	✔	✔	5
Mr Declan Herbert	✔	✔	✔	✔	✔	✔	6
Ms Maribe Fallon	✔	✔	✔	✔	✔	✘	5
Ms Michelle Jackson			Appointed to the Board	✔	✔	✔	3

Executive Management Team

Comprising of senior members of the Hospital staff, the Executive Management Team is responsible for the successful implementation of strategic objectives including the safe delivery of efficient and effective patient care, and continuous improvements. At least one member of the Executive Management Team is represented on each of the Hospital's numerous committees.

Members of the Executive Management Team as at 31.12.2020

Ms Angela Lee
Chief Executive Officer (CEO)

Mr Peter Keogh
Consultant Orthopaedic Surgeon
Clinical Director

Mr Paul Curtin
Consultant Orthopaedic Surgeon
Chairperson of the Medical Board

Dr Geraldine O'Leary
Consultant Anaesthetist
Honorary Secretary
of the Medical Board

Ms Aoife Gallagher
Chief Operations Officer (COO)

Ms Kathy O'Sullivan
Director of Nursing

Ms Regina Byrne
Financial Controller

Ms Ruth Kiely
Therapy Services Manager

Mr Pat O'Neill
Facilities Manager



Hospital Committees

Hospital committees assume responsibility for operational efficiency, process optimisation and continuous improvement. One or more members of the Senior Management Executive is represented on each committee.

Sub-Committees of the Board

- Finance
- Remuneration
- Patient Care & Mission Effectiveness
- Research & Ethics Committee
- Clinical Governance & Clinical Risk
- Health, Safety & Risk Management
- Infrastructural Development

Clinical Audit

- Orthopaedic Clinical Audit Review
- Rehabilitation Medicine Clinical Audit Review

Committees reporting to Clinical Governance and Clinical Risk

- Drug & Therapeutics
- Radiation Safety
- Diagnostic Imaging IV Protocol Review
- Transfusion
- Infection Prevention & Control
- Hydration & Nutrition
- Wound Management
- Pressure Ulcer Prevention & Management
- Sepsis Management
- Falls Prevention
- Paediatric Review
- High Dependency Unit
- Laboratory Quality Review
- Safeguarding
- Information Governance & Healthcare Records
- Health and Well-being
- Outpatient Service Performance Improvement
- Theatre Users

Committees reporting to Drug & Therapeutics

- Medication Management
- Pain Management

Committees reporting to the Senior Management Executive

- Bed Management
- Nursing Management
- Theatre Scheduling
- Hygiene Services
- Training
- Technical Services
- Department Heads
- IT Development
- NOHC Green Energy Committee
- Marketing PR Committee

The Medical Board

The Medical Board comprises members of the Hospital's Consultant body. The Medical Board is chaired by Mr Paul Curtin, Consultant Orthopaedic Surgeon, who was assisted in 2020 by Honorary Secretary, Dr Geraldine O'Leary, Consultant Anaesthetist. Convening at regular intervals, the Medical Board provides a valuable advisory service to the Hospital, ensuring high standards of surgical and medical practice, patient safety and care.

Medical Board Members as at 31.12.2020

Mr Paul Curtin
Chairperson

Dr Geraldine O'Leary
Honorary Secretary

Mr Peter Keogh
Clinical Director

Dr Brendan McGarvey
Dr Nicholas Eustace
Dr Kim Hunter
Ms Noelle Cassidy
Mr Connor Green
Mr Paul Connolly
Prof. Damian McCormack
Dr Conor Hearty
Prof. Eoin Kavanagh
Dr Grainne Kearns
Dr Brid McGrath
Mr Peter Keogh
Dr Cormac Redahan
Dr Enda Shanahan
Dr Frances Conway
Dr Patrick Higgins
Dr Viera Husarova
Dr Graham Lee
Dr Marie O'Connor
Prof. Peter O'Gorman
Dr Deirdre Brady
Mr Neil Burke
Mr Keith Synnott
Mr Conor Hurson
Mr Michael Donnelly
Mr Denis Collins
Mr Gavin McHugh
Mr James Cashman
Mr Patrick Kenny
Mr Niall Hogan
Mr Alan Molloy
Mr James Walsh
Mr Paul Moroney
Prof. Robert Flavin
Mr Gary O'Toole
Prof. John O'Byrne
Ms Grainne Colgan
Prof. Geraldine McCarthy
Mr Hannan Mullet
Mr Kieran O'Shea
Ms Olivia Flannery
Mr Patrick Groarke
Prof. Stephen Eustace
Mr Marcus Timlin
Mr Seamus Morris
Prof. Conor O'Keane
Mr David O'Briain
Dr Raymond Carson





Quality & Compliance

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Mission, Vision & Values

Mission



We commit to caring for all patients with excellence, respecting the uniqueness of each person and treating everyone with compassion and integrity.

Vision



To be recognised as the National Orthopaedic Hospital and as academic leaders in the field of musculoskeletal disorders, driving research and delivering best-in-class, patient-centred care and specialist rehabilitation.

Values



Respecting human dignity

Showing compassion

Upholding justice

Creating a caring and safe community

Striving for excellence

2020 marked the final year in our Strategic plan 2018-2020. We are proud to report that despite the disruption of the Covid-19 pandemic, we continued to report strong performance towards delivering our strategic goals and realising our vision for 2021. We look forward to building on our progress and defining a new strategy to guide future efforts where our patients remain central to the Hospital's strategic, management and operational development.

Strategic Plan 2018-2020

Strategic goals	Performance highlights
Improve patient access to care through increased activity and service development	• Increased hospital activity across all stages of care for the period of the strategy • Five surgical theatres operational at peak times • First Irish public Hospital to perform same-day Total Hip Replacement (THR) surgery and discharge • Expanded Sports & Exercise programme and established links with Sport Ireland Institute • Successfully expedited patient discharge and reduced average length of stay by 0.4 day, increasing capacity and reducing waiting lists • Engaged with the HSE / NTPF and CHI to accelerate treatment for patients with orthopaedic conditions • Increased paediatric service capability • Established Multidisciplinary Limb Reconstruction Team for Cappagh Kids paediatric services • Established Rapid Access Scoliosis Service for Cappagh Kids paediatric services • Improved national access to services through the introduction of telehealth and virtual clinics • Initiated Rapid Improvement Events (RIEs) in the Admissions Department and Preoperative Assessment Clinic to improve patient flow
Enhance clinical engagement and clinical governance across all services	• Established the position of Clinical Director • Increased engagement between the Executive Management Team and Medical Board • Improved medical representation at governance meetings • Successfully implemented the Irish National Orthopaedic Register (INOR) • Defined the referrals process for the Specialist Rehabilitation Unit • Increased medical participation in PR activity
Strong promotion, marketing and positioning of the Hospital	• Successfully launched the Hospital's new name and brand identity • Website launch, social channel activation and Hospital video completed • Profile elevation in collaboration with the appointed PR company • Completed Phase 1 signage installation • Improved staff engagement for PR and marketing purposes • Development of App technology in collaboration with MyPatientSpace for postoperative care optimisation for Total Hip Replacement (THR) and Total Knee Replacement (TKR) patients

Strategic Plan 2018-2020 continued

Strategic goals	Performance highlights
Investment in Infrastructure and IT to reflect best practice models of care	• New Admissions Department opened in July 2020 • Planning for Radiology Department infrastructural upgrades. Finalised the x-ray room refurbishment and equipment installation (MRI 1.5T upgrade and new CT scanner) • Hospital campus electrical review in progress • Plans developed for a new Higher Dependency Unit (HDU), ward block and surgical theatres • Refurbishment of the convent building to create a board room, offices, Cappagh Kids Paediatric Outpatient Clinic, and the Professorial Unit are ongoing and will be completed in 2021 • Prepared plans for the laboratory expansion and works are expected to commence Q2 2021 • Short-term measures for expanding and upgrading theatre changing and welfare facilities in response to Covid-19 require long-term solutions. Plans are in development* • Plans to install a two-story modular build to create more dining space and office space in progress* • Works underway on the conversion of St. Paul's Gym into a 4-bed ward • Additional car parking spaces are in planning to cater for increased staff and visitor numbers • Installed a modular unit to relocate the HR Department to free up clinical space • Full external IT review undertaken and ongoing actions in progress • Participation in Centre of Excellence Project with Johnson & Johnson • Successfully piloted HSE Analytics system. NOHC will be the designated first adopter of this system in 2021 *Covid-19 Response

Strengthen our academic, research and innovation profile and capability	• Hosted Intercollegiate FRCS (Tr. & Orth) examinations 2019
	• Hosted Consultant-led webinar to mark the brand launch and inform GPs of NOHC services (Webinar streamed to GPs)
	• Development of GP engagement programme
	• Introduced National Casting Programme Level 7 / 8 - National Certificate in Musculoskeletal Casting and Splinting (adults and children)
	• Increased research activity
	• Hosted Cappagh Hospital Foundation Day featuring world-renowned Orthopaedic consultants and members of the NOHC consultancy body
	• Hosted Annual National Nurses Orthopaedic Conference 2018 and 2019*
	• Gained recognition for our people and our work
	  › Young Hospital Professional of the Year 2018
	  › Irish Nurse of the Year 2019
	  › Shortlisted for 4 Irish Healthcare Awards 2019
	  › First Commendation for Irish Healthcare Award 2020 (Hospital's response to Covid-19)
	2020 events cancelled because of Covid-19*

Patient Safety Goals

The Hospital uses International Patient Safety Goals (IPSGs) to identify and address potential risks for improved patient safety. We work closely with patients and their families, providing support and advice, education and information for optimal patient safety. A strong culture of workplace transparency and openness underpins our commitment to patient safety and care.





Identify patient correctly

The Patient Identification Committee meets quarterly to review incidences and processes, and recommends enhancements to patient safety. Multifactorial identification, durable patient identity bracelets and colour-coded wrist bands for high-risk patients are just some of the measures undertaken to ensure the safe provision of care.



Improve effectiveness of communication

Communication plays a crucial role in patient safety. In 2020, as the Hospital provided better access to care for patients through digital means, great care was taken to ensure all written, in-person, and virtual communications were accurate, complete, timely, unambiguous and understood.



Improve the safety of high-alert medication

During 2020 we continued our work to improve patient safety and prevent adverse outcomes in the use of high-alert medications, progressing initiatives introduced in 2018 and 2019.



Ensure correct site, correct procedure, correct patient surgery

Patients navigate a complex journey to surgery, and when they present in theatre, thorough and consistent preoperative processes minimise the incidence of avoidable harm. We continuously review and update theatre procedures to protect patients against preventable occurrences that can cause harm.

Patient Safety Goals

Reduce the risk of healthcare-associated infections (HCAIs)

A healthcare-associated infection (HCAI) occurs in a patient during the process of care in a hospital or other healthcare facility that was not present or incubating at the time of admission. Hand hygiene is the most critical measure in reducing HCAIs.

In NOHC, all staff practice the World Health Organisation's 5 Moments for Hand Hygiene when caring for patients. In 2020 our hand hygiene compliance rate was 84.5%, up 4.6% from 2019. All staff complete mandatory infection prevention and control training every two years, which includes hand hygiene education. Alongside the Infection Prevention and Control (IPC) team, 21 trained hand hygiene champions across the various disciplines in the Hospital carry out peer hand hygiene education regularly.

NOHC achieves a high rate of compliance in environmental hygiene (92.7%), patient equipment (97.6%) and sharps (99%). Linen compliance has also improved significantly to 90.2% in 2020, up from 77.8% in 2019.

In light of the emergence of Covid-19, we introduced a policy of mandatory mask wearing for staff in the Hospital in 2020. All patients are monitored for Covid-19 symptoms on every shift, and as per national guidelines, all patients undergoing surgery must have a negative Covid-19 test result within 72 hours of surgery. Two single isolation rooms are kept free at all times for patients who become symptomatic.

Personal Protective Equipment (PPE) training, donning and doffing, hand hygiene and naso oropharyngeal swabbing were some of the training delivered by the IPC team regularly during Covid-19.

Reduce the risk of patient harm through falls

Long-stay patients, particularly the older cohort of patients, are at increased risk of injury from slip and fall incidences. The Falls Prevention Committee endeavour to identify patients at risk, mark files and apply colour-coded wrist bands to minimise the potential of harm to those at risk.



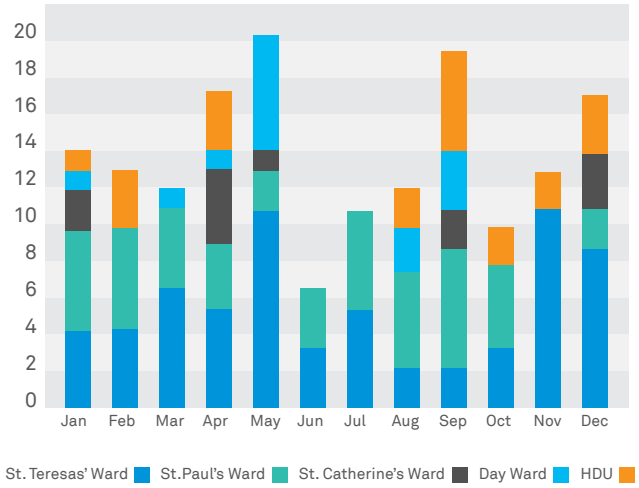
Incident Reporting

Incident reporting highlights human factors, process deficits and equipment inadequacies that can compromise patient safety. The practice of incident reporting enables us to identify and understand risks to patient safety and introduce new practices to prevent recurrence.

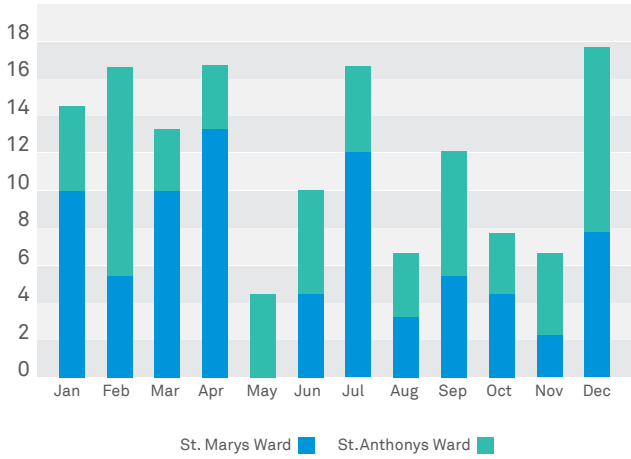
Clinical incidents

A total of 630 clinical incidents were brought to light in 2020, which represents a 17% decrease on the same period in 2019. Graph activity reflects the intense changes in response to outbreaks over the past 12 months. Activity fluctuations can be linked to the cancellation of non-essential elective procedures and services, the Hospital's transition to trauma service and safety measures introduced in response to public health guidelines.

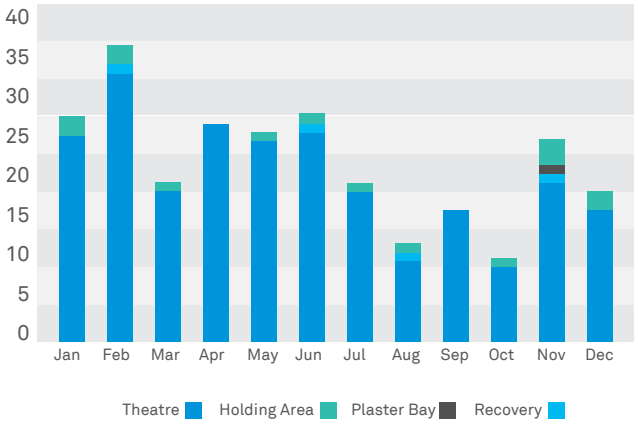
Clinical incidents 2020 Orthopaedic wards



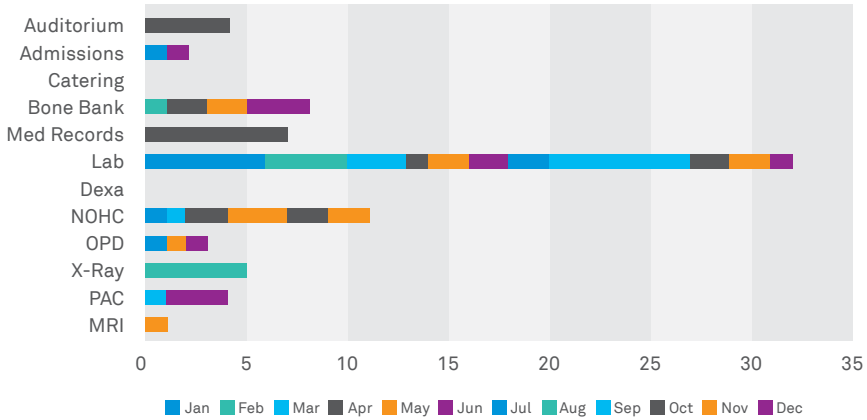
Clinical incidents by location Rehabilitation units - 2020



Clinical incidents 2020 - Theatre



Clinical incidents by location - Other Depts - 2020



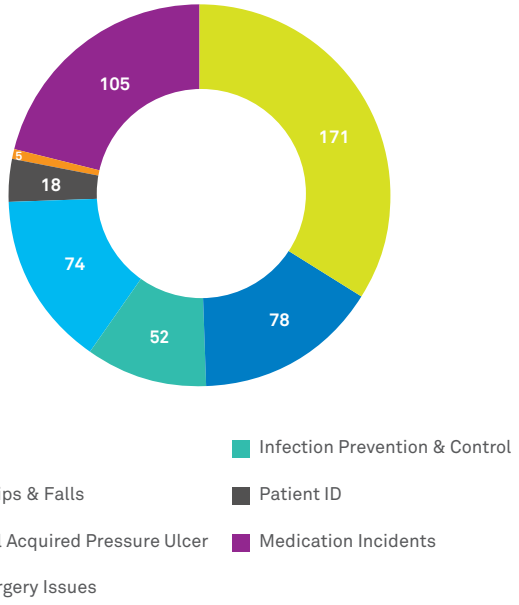
Clinical incidents by severity

Extreme	0%
Major	<1%*
Moderate	7%
Minor	14%
Negligible	79%

* fracture from a fall leading to 3-month inpatient stay

Incident Reporting continued

Clinical incidents by hazard category



Wounds

A 28% increase can be attributed in large part to an increase in blisters linked to dressings.

Infection prevention and control (IPC)

IPC incidents increased by 110% in 2020, however 90% of this increase (28 cases) can be attributed to Covid-19 infection.

Slips, trips and falls

There was a 40% reduction in slips, trips and falls at the hospital. The majority (81%) of incidents caused no harm, 13.5% required first aid, 0.5% necessitated x-ray, and 1 patient experienced a hip fracture.

Patient ID

We are happy to report that patient ID incidents reduced from 24 in 2019 to 18 in 2020.

Hospital acquired pressure ulcer

Five incidents of hospital acquired pressure ulcers were recorded in 2020, which represents a reduction of 3 incidents on the previous year.

Safe surgery incidents

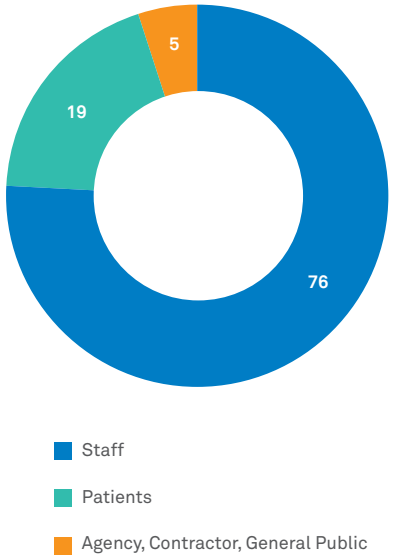
Of the 171 safe surgery incidents recorded in 2020, intra-operative equipment issues and consent errors accounted for the most common infractions.



Non-clinical incidents

In 2020 there was a sharp rise in the number of Non-Clinical Incidents reported. The majority (76%) of the 306 reports filed related to staff. 51% of staff members required first aid and 4% required medical treatment (5 sprains, 4 Covid-19 infections requiring hospitalisation, 1 cut and 1 concussion). The majority of non-clinical incidents occurred in high activity areas such as theatre, day ward and reception.

Non-clinical incidents by group

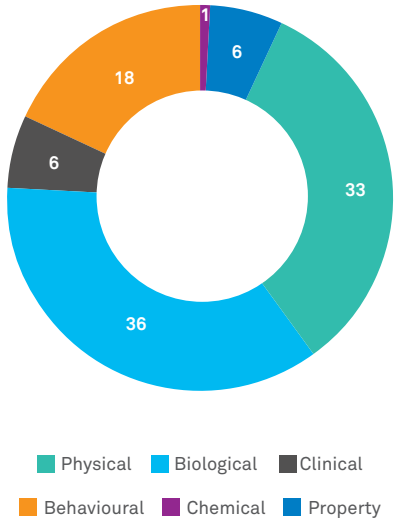


Non-clinical incidents severity

Major	1 *
Moderate	29
Minor	137
Negligible	34

*An IT system failure resulting in a 2-day email outage was investigated to prevent recurrence.

Non-clinical incidents by hazard



Biological hazards

- 60% Covid-19 related incidents
- 22% Contact with needlesticks
- 9% Environmental issues

Physical hazards

- 25% Mechanical objects
- 21% Systems and installations
- 20% Slips, trips and falls
- 34% Other (manual handling, ergonomics, electrical, etc),

Clinical hazards

- Data protection, documentation, and transport issues

Behavioural issues

- Staff experienced increased verbal abuse by phone

Patient Feedback

“ I am just writing to say how grateful I am to everyone at Cappagh Hospital who looked after me before, during and following my recent knee surgery. **My consultant was lovely and I felt very safe under his care and every single member of nursing and care staff were absolutely wonderful.** Very many thanks to everyone involved but particularly my surgeon, the theatre staff and the nursing staff.”

“ The reason for this correspondence is to commend the staff of your hospital for the treatment and care that they gave my mother. **I cannot over emphasise the warmth and professionalism that she and I encountered, and indeed the good humour of your staff as they face very challenging circumstances.** This includes the medical team, the nursing, staff, occupational therapists and social work department. I would also like to comment on how incredibly supportive staff were towards me as we face into the challenges that lie ahead as we hope to enable my mother’s continued independence. **You have an amazing team there and we will always have fond and warm memories of them.”**



" I recently had surgery at the hospital and was so impressed with the care and treatment I received. From the moment I came through admissions I was taken care of, **I felt like a VIP in a 5 star hotel.** There was a lovely atmosphere which was evident as the staff from top to bottom were so efficient and friendly. The level of hygiene and cleaning was exceptionally high."

" My father-in-law has asked could I send an email to the Staff of HDU. He would like to sincerely thank the staff for all their care while he was an inpatient. Happy Christmas to you all, **you are all earth angels.**"

" I would like to thank the entire team for the care I received during my time with you. The care from Pre op all the way to discharge was very efficient and professional. **My whole experience during my treatment was a very positive one and I'm now recovering well.** A special thanks to the catering staff for all their care and especially their good humour which helped all the patients on the ward and kept the spirits high."

" I had the privilege of being a patient in Cappagh two weeks ago for the procedure of a full hip replacement and I was so highly impressed that I felt it warranted acknowledgement. From the moment I entered the hospital, through admissions and being assisted by a porter to the pre-op ward to the moment of discharge, it was so apparent that the hospital runs to military precision! **Every single member of staff conducts themselves with compassion and professionalism as well as efficiency coupled with superb patient care. Cappagh hospital for me was the best experience I've ever had of a hospital and please pass my compliments on.** Keep up the good work. I'm confident that the care provided certainly positively impacts the lives of many."

" On behalf of my family & I, I wish to express a sincere thanks for the care you have given our father since mid March. We are aware that, at times, he is not the easiest patient to care for but **you have given him the best care possible and demonstrated ultimate professionalism and kindness at all times.** Sincere thanks for everything."

" **I would like to take this opportunity to express my sincere gratitude for the excellent care I received in the hospital over recent months.**"

" Everyone I have spoken with who knows about, or has experience of Cappagh, speaks highly of it. **I am more than happy to also give the height of praise to the hospital and staff.** Keep up the good work and may everyone keep safe and well in this strange time of Covid-19 virus."

" I was then brought down to the theatre by another lively & friendly nurse. **I was well looked after by all in theatre.** I must say that I felt very comfortable with all their covid procedures it made me feel very much at ease. Thanks again."

" I would like to thank all the staff at Cappagh from the first day I attended. **They were fantastic couldn't do enough for me. I even fell in love with one of the nurses (but don't tell the wife!)**"

Operational Excellence

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IT Services	57

Theatre Activity

Theatre procedures

2020	**3,478**	**+3%**
2019	**3,364**	**+4%**
2018	**3,229**	**+8%**
2017	**2,994**	

Top 5 surgical procedures

Total hip replacement and revision	**771**
Total knee replacement and revision	**706**
Foot surgery	**461**
Shoulder surgery	**199**
Arthroscopy knee	**151**

Surgical patients age profile

0-18	**250**
19-30	**283**
31-45	**496**
46-60	**960**
61-65	**412**
66-80	**930**
80+	**147**

Surgical patients gender profile



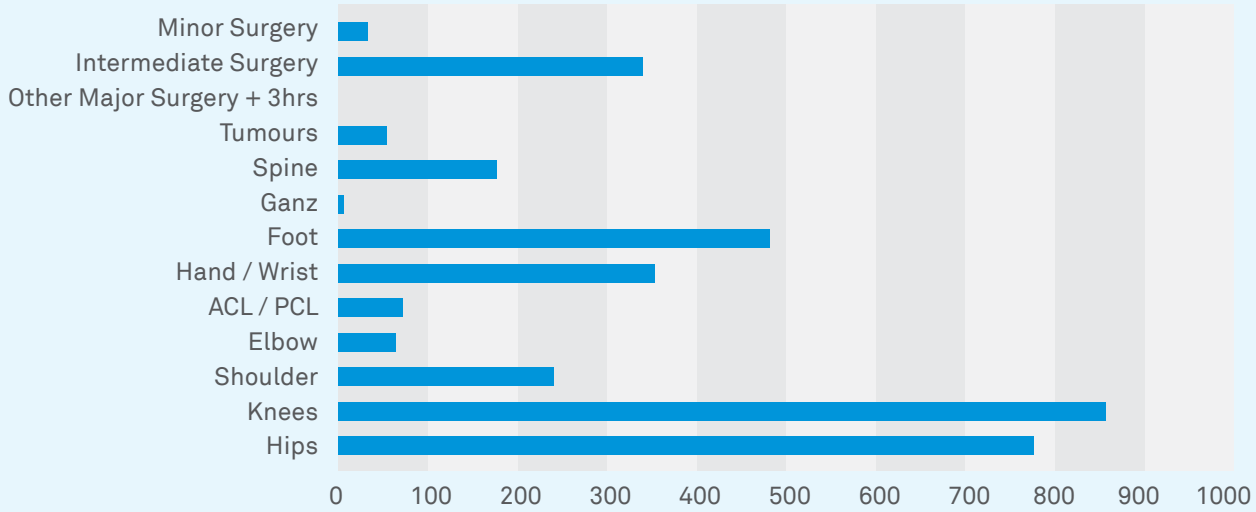
1,823



1,655

Theatre Activity continued

Surgical speciality activity



In 2020, surgical activity at the Hospital increased by 3% on 2019. Theatre 5 was commissioned for peak periods, and we succeeded in meeting HSE targets.* Despite increased surgical activity, core hip and knee surgical procedures decreased by 17% on 2019 numbers. Day case activity was on par with 2019 activity and 29% ahead of the HSE revised target for 2020.* The year-end inpatient surgical waiting list indicated 280 patients were waiting more than 6 months for treatment.

*HSE targets were reduced to reflect Covid-19 disruption.





Hospital Activity

Outpatient Department Clinic activity

Clinic	New attendees	Review appoints	Clinics held
Consultant Orthopaedic Clinics	1226	2944	328
Sports & Exercise Medicine	313	363	102
Rheumatology	80	81	36
Bone Tumour	140	680	120
MSK Triage	1256	483	228
Rehabilitation	-	62	9
Joint Register Clinic	-	4696	-
Preoperative Assessment Clinic	6648	-	-

Consultant Orthopaedic Clinics

The abrupt disruption of the pandemic forced the suspension of non-essential surgical procedures and Outpatient Clinic appointments. As a result, 328 Consultant Orthopaedic Clinics ran during 2020, representing an 18% reduction on 2019. Of the patients attending, 1,226 represented new referrals, and 2,944 were review consultations. Virtual clinics leveraged available technology to enable remote access to care, however, some patients required physical appointments and physical examinations for diagnosis and treatment. On the resumption of physical appointments, Orthopaedic Clinics worked at reduced capacity for the safety of patients and staff and in line with national guidelines.

Paediatric Orthopaedic - Cappagh Kids' Clinics

The figures for Consultant Orthopaedic Clinics include numbers for patients attending the Cappagh Kid's Outpatient Department. During the year, 243 new patients attended the clinic, and 257 young patients were reviewed by the Cappagh Kid's team.

The Limb Reconstruction Team applied 55 fixator frames, performed 17 supplementary surgical procedures and removed 27 fixator frames in 2020. Young patients with fixator frames wear their frames for up to 18 months and must attend the Hospital regularly for pin site cleaning and physiotherapy. Demand for limb reconstruction services continues to grow with year-end waiting lists showing 107 young patients awaiting limb reconstruction surgery.

In 2020, the Cappagh Kid's team continued to diagnose and treat patients with Perthes' disease and participate in global research to learn more about disease aetiology and define best-in-class surgical procedures for the treatment of this disease.

A Rapid Access Scoliosis Service was established to improve access to care for people living with scoliosis. Virtual consultations enhance access to relevant services at the Hospital. Initially patient referrals are triaged by the nursing staff and patients undertake an x-ray prior to consultation. The young patient and their parent(s) are invited to attend a virtual consultation to discuss the degree of curvature and treatment recommendations. The Consultant Orthopaedic Surgeon may recommend continuous surveillance, request an MRI, or recommend an in-person consultation.

In 2020, Scoliosis Warriors and former patients Millie and Diarmuid shared their stories with the media to raise awareness of scoliosis and inspire others undergoing treatment for the condition.





Hospital Activity continued

2020 highlights - Radiology

Radiological exams	Interventional radiological procedures	MRI scans	Dexa scans
20,043	**1,765**	**4,509**	**375**

Radiology

It was another busy year for the Radiology Department. Although patient capacity and throughput reduced, stringent hygiene and physical distancing measures and Covid-19 related absenteeism placed increased demands on staff. Several exciting changes in Radiology will increase the department's capacity, diagnostic capability and enable more minimally invasive surgical procedures.

The Department is preparing to retire an x-ray machine that has served for more than 20 years, producing over 200,000 impressions during its lifetime. Its successor, the Carestream DRX-Evolution, offers enhanced image quality, improved efficiencies and innovative features, including advanced paediatric capabilities, a higher weight capacity table, and bone suppression software. This project will be completed in Q2, 2021.

The Hospital will also welcome a new Cios Fusion mobile C-arm system that offers high resolution digital imaging capability, an intelligent dose efficient algorithm and high operating convenience.

Planning works for the MRI 1.5T upgrade, and the new CT scanner continued during the year, with enabling works for both projects scheduled for January and May 2021, respectively. Funded by the Cappagh Hospital Foundation (CHF) through the generosity of patients and the public, the CT Scanner will make an enormous difference to the patient experience at NOHC. The Hospital can begin to establish a national minimally invasive spinal intervention unit (currently absent in Irish healthcare) and facilitate the percutaneous treatment of bone tumours including osteoid osteomas. At present, affected patients are treated in theatre at NOHC or sent abroad, and waiting lists for this treatment are significant. The CT scanner will also allow onsite staging of bone and soft tissue tumours, the surgical planning for prosthesis surgery, and onsite diagnosis and treatment of pulmonary embolism.

We are looking forward to the installation of this new state-of-the-art equipment providing advanced diagnostics and disease progression monitoring, postoperative imaging and interventional radiological procedures for more patients.

Pathology

The Pathology Department provides biochemistry, haematology, microbiology, blood grouping and transfusion services. In 2020, the department processed 142,609 laboratory tests in-house.

Bone Tumor Centre

The Bone Tumour Centre continued to provide essential services for patients throughout 2020. In-person and virtual consultations enabled 140 new patients and 680 review patients to access oncology services at the Hospital. Professor Gary O'Toole and Mr Alan Molloy performed essential surgical procedures for primary bone and soft tissue tumours. The Bone Tumour Team collaborated with the National Sarcoma Service multidisciplinary team (MDT), providing advice for best practice tumour biopsy to national orthopaedic surgeons, and performing the biopsy and surgical resection of complex tumour masses. Ms Margaret Cavanagh, Clinical Nurse Specialist, worked closely with the Bone Tumour Team, providing specialist clinical and practical support for patients and their families.

Rheumatology

Operating 36 clinics in 2020, activity in the Rheumatology Department was impacted by Covid-19, causing the temporary suspension of Outpatient Department Services during lockdown and reduced patient appointments for physical distancing purposes. Despite these challenges Rheumatology welcomed 80 new patient referrals to the Hospital and conducted 81 patient reviews.

Sports & Exercise Medicine

The suspension of competitive sporting events, club training, and sports fixture closures impacted activity at the Department of Sports & Exercise Medicine in 2020.

The Department operated 102 clinics during the year, welcoming 313 new patient referrals and conducting 363 patient reviews. Dr Noel McCaffrey, Dr Pat O'Neill, Dr James O'Donovan and Clinical Specialists in Musculoskeletal Physiotherapy work collaboratively to deliver this service.



Hospital Activity continued

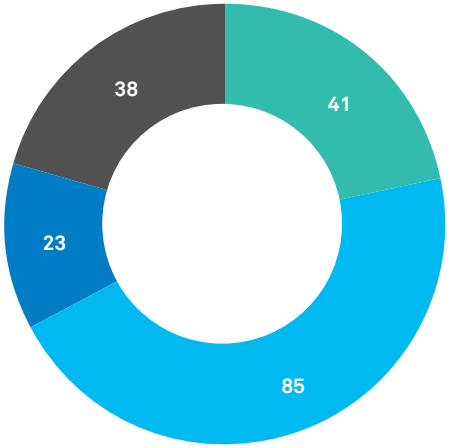
2020 Specialist Rehabilitation Unit (SRU) highlights

Patients admitted
187

Patients under 65 successfully discharged home
80%

Patients over 65 successfully discharged home
68%

2020 was a challenging year for all working in healthcare due to the Covid-19 pandemic. A total of 187 patients were admitted to the Specialist Rehabilitation Unit during the year.



Admissions to the SRU

Patients	Mater	Connolly	NOHC
65 years +	41	85	23
18-64 years	38	0	0

Discharge activity

Patients under 65 years
80% of the younger patient cohort were discharged home independently or with some support through a home care package. Three patients were transferred to long-term care following their rehabilitation.

Patients over 65 years
For patients aged 65 years and older, 68% were discharged home with family support or additional home care packages. Sixteen patients were transferred to long-term care.

Length of stay
Between August and December 2020, 23 patients admitted for planned surgery were rehabilitated on site. The average age was 76.6 years, with the length of stay averaging 29 days. Eight patients required a new home care package, two required home help, two were transferred to acute hospitals due to medical complications, and one patient was transferred to long-term care.

Covid-19 Outbreaks

Like many hospitals, Covid-19 outbreaks occurred at the NOHC. At the end of March 2020, the Specialist Rehabilitation Unit (SRU) experienced an outbreak that resulted in patients and staff contracting the virus. The patients imapcted were transferred to their referring hospital for specialist treatment.

Operating to Reduced Capacity
To comply with physical distancing and prevent viral transmission, the Hospital reduced the number of beds per room from 6 to 4, thus limiting the overall SRU capacity to 32 beds.

As the country reopened in the summer of 2020 and orthopaedic activity increased, the need to rehabilitate some of NOHC's orthopaedic patients who had been cocooning before surgery became evident. The provision of rehabilitation services for NOHC's own postoperative patients was welcomed by the Medical Board.



Gillian Grant, Senior OT and Evelyn Kimmage, Senior Physiotherapist conducting a virtual consultation.

Virtual consultation and collaboration

The team used social and virtual platforms, including WhatsApp, Attend Anywhere and Zoom, to consult with families about discharge planning, connect patients with loves ones, conduct virtual therapy sessions and check patients progress following discharge. Throughout the year, the delivery of the services available within the SRU continued in compliance with government guidance.



Our staff calling numbers through the ward windows to the patients to help lift the spirits.

Patient engagement

Lifting spirits!

During the lockdown period, visitors were not permitted on site. Recognising the importance of a positive mindset for patients in recovery, our staff employed innovative tactics to lift the spirits, including bingo and postcard writing.

Celebrating Older Person's Day

To celebrate International Older Person's Day on 1st October 2020, we asked patients in the Specialist Rehabilitation Unit (SRU), "What advice would you give to your younger self?"

With almost 618 years of collective life experience between them, our nine patients who participated in the event were upbeat and positive in the advice they would have given their younger selves, as can be seen in the picture.



We captioned some "Words from the Wise!" to celebrate Older Person's Day

Increasing Awareness

World Brain Day

On 22nd July 2020, we celebrated World Brain Day with a staff presentation to raise awareness of the impact of a brain injury on the patient and their families. Patients suffering from a brain injury also participated in a quiz and other activities with the team.



Rehabilitation Service planning

The Tilda Longitudinal Study (2021) provides us with valuable insights into the impact of Covid-19 on our older patient cohort. We will give these findings significant consideration in the future planning of rehabilitation services. The study reports that:

- 22% of older adults are not meeting the minimum level of physical activity
- 21% of adults aged over 60 years reported clinically meaningful signs of depressive symptoms
- 69% of all study participants aged over 60 years report leaving the house less often
- 80% of all participants aged over 60 years reported not visiting friends since the pandemic outbreak.



OT Student with Gillian Grant, Senior OT.

Clinical governance:

During 2020, clinical governance for Connolly patients remained with Dr Eamon Dolan and Dr Marie O'Connor Consultants in Older Persons Medicine.

Dr Raymond Carson, Consultant in Rehabilitation Medicine, continued until his resignation in November 2020 to have clinical governance of all patients referred for rehabilitation from the Mater Miserciordiae University Hospital.

Occupational Health

2020 highlights

Flu vaccine uptake **77%**

Rapid response and upscale in response to Covid-19

As the pandemic struck in early 2020, it became apparent that the Hospital's Occupational Health Department was significantly under-resourced. At that time, 15 hours per week was dedicated to providing almost 500 staff members with occupational health services. As the viral infections rose, additional resources were deployed to assist Covid-19 related efforts, increasing the departmental time allocation to 98 hours a week. In the months that followed, 69 staff members tested positive for Covid-19, and countless others became symptomatic or were deemed close contacts and forced to isolate.

The Occupational Health Team created staff information packs detailing Covid-19 symptoms, protocols, HSE guidelines and best practice. Team members conducted Covid-19 testing, contact tracing and case management for absent staff members. Regular contact was initiated with staff cohorts that included at risk, Covid-19 infected, pregnant staff members and close contacts. Members of the team were placed on call, conducting out-of-hours contact tracing in response to outbreaks to ensure continuity of service.

Working in collaboration with the Human Resource Department and Department Heads, the team defined return to work protocols, recommending return to work interviews, phased returns, and the ongoing surveillance of colleagues to ensure staff wellbeing and the provision of safe patient care.

As Covid-19 infections began to fall, the Occupational Health Team mounted a campaign to encourage flu vaccine uptake among staff members. I am delighted to report that 77% of staff members availed of the vaccine in 2020, an increase of 22% on 2019 figures.

At the time of writing, 60 hours are allocated to Occupational Health Services at the Hospital. We are committed to improving occupational safety, promoting physical and mental well-being and equipping our colleagues with the tools for recovery, improved health, resilience and high performance.

Given the Hospital's substantial workforce, we see the need for greater occupational health resources, supports and OH-specific software to assist operations. We also recognise the need for a private consultation room, where staff can talk to the Occupational Health Team members in confidence.

As Covid-19 cases continue to decline, we will review our long-term absences, injury and illness management. We will also encourage our people to recover and recharge, exercise and eat well, and look after their mental health and well-being.



Nursing Services

2020 highlights

Compliance with theatre nursing metrics **92%**

Compliance with departmental nursing metrics **95%**

Nursing metrics

Nursing metrics are an agreed standard of measurement for nursing care, where care delivered to patients can be monitored against standards or benchmarks. The nursing care metrics cover areas which are of the highest concern in terms of risk.

Individualised reports were provided to each acute area indicating targets achieved using a traffic light system. The traffic light system enables healthcare staff to identify when the quality of care being delivered has fallen below the required standard of care by a colour coded traffic light effect. Action plans were agreed and implemented to ensure greater attention to detail in these areas with a resultant improvement in patient care.

The overall theatre compliance rate for 2020 was 95%, and Departmental compliance was 92%, which is an exceptional achievement considering the year in context. I am delighted to report that St. Joseph's Day Care Ward recorded an impressive 99% compliance rate. Whilst the rate of compliance across all areas was high, a number of areas have been highlighted for address as follows:

- Communication: Postoperative signature handover
- Tissue viability: Diathermy site
- Immediate postoperative care: Discharge checklist

Now that incidences of Covid-19 have abated, we will concentrate our efforts on further improving performance in these areas.

Test your care - Reporting/ Create your own

NOHC Ward / Unit 2020	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
HDU	89%	95%	92%	98%	100%	97%	96%		100%	100%	100%	100%	97%
St Joseph's Day Care Unit	99%	98%		96%	100%		99%	97%	100%	99%	97%		99%
St. Anthony's Rehab	95%	92%	93%	97%	90%	88%	95%	91%	89%	92%	92%	89%	92%
St. Mary's Rehabilitation Ward	91%	93%	89%		92%	88%	86%	86%	84%	82%	86%	86%	87%
St. Paul's Surgical Ward	94%	95%	91%	100%	92%	89%	93%	93%	95%	88%	85%	94%	92%
St. Theresa's Surgical Ward	92%	98%	91%	88%	93%	89%	97%	91%	86%	85%	85%	89%	90%
Total	**92%**	**95%**	**91%**	**95%**	**94%**	**91%**	**95%**	**91%**	**92%**	**90%**	**90%**	**92%**	**92%**

2020 Test your care - Nursing metrics results

HSE theatre - Operating theatre	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Communication													
Name, HCRN & OP	100%	100%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%
Allergy status	100%	90%	80%	90%	100%	100%	70%	100%	100%	90%	100%	100%	93%
Safe site surgery	100%	70%	90%	100%	90%	100%	90%	100%	100%	100%	80%	100%	93%
Traceability sticker	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Pre & post swab tally	100%	90%	100%	100%	100%	100%	100%	100%	90%	100%	90%	100%	98%
Pre op signature handover	100%	100%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%
Post op signature handover	70%	100%	70%	75%	70%	60%	70%	90%	100%	90%	60%	70%	78%
Tissue viability :													
Pressure area assessment	100%	90%	90%	90%	90%	90%	90%	90%	80%	90%	80%	100%	90%
Pressure relieving devices	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Diathermy site	80%	70%	90%	75%	80%	100%	100%	80%	67%	75%	70%	89%	81%
Pressure area check transfer	100%	80%	70%	100%	100%	90%	100%	90%	100%	89%	90%	100%	92%
Pain management	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Pain status													
Analgesis admin	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Pain score on D/C	100%	90%	100%	100%	100%	100%	100%	80%	100%	100%	80%	90%	95%
Immediate post operative care	100%	100%	90%	100%	90%	100%	100%	100%	100%	100%	100%	100%	98%
Airway management													
Level of consciousness	100%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%
B/P, T,P, R, SPo2 Post op	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
B/P, T,P, R, SPo2 transfer	100%	90%	100%	89%	100%	100%	100%	100%	100%	100%	100%	90%	97%
Wound site check	100%	100%	80%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%
IV therapy / Fluid management	100%	100%	88%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%
Urinary output	100%	100%	88%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%
Regional block check	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	71%	100%	98%
Discharge checklist	100%	70%	100%	100%	70%	100%	67%	90%	100%	80%	60%	100%	87%
Total	**98%**	**93%**	**92%**	**97%**	**95%**	**97%**	**95%**	**96%**	**97%**	**96%**	**91%**	**98%**	**95%**

Therapy Services

2020 highlights

Trauma patients treated by Orthopaedic Service Physiotherapy Team

341

Outpatient appointments managed virtually

28%

Total knee replacement surgery patients successfully managed through virtual clinics

83%

Therapy Services provides physiotherapy, occupational therapy, hand therapy, clinical specialist physiotherapist-led injection clinics, MSK triage clinics, dietetics, speech and language therapy, clinical psychology and podiatry to all patients in Orthopaedics and the Specialist Rehabilitation Unit.

The onset of Covid-19 forced Therapy Services to adapt to new ways of working. Embracing telehealth platforms that included WhatsApp, Attend Anywhere and Zoom, the team delivered safe and effective services for postoperative patients during the pandemic.

We transitioned from scheduled care to ambulatory trauma orthopaedics on March 18th 2020, and therapy staff received skills training for the service transition. Between March and July 2020, 341 patients were managed through this system, and staff changed working practices to minimise the transmission of the virus from March to May 2020.

The easing of hip precautions for patients undergoing Total Hip Replacement continued in 2020. Occupational Therapy noted an 18.4% decrease in the provision of "Hip Packs", and 38% of all patients admitted for surgery did not require any equipment postoperatively.

Discharge destinations following surgery were limited during 2020 due to Covid-19 and 23 NOHC patients were rehabilitated on site between September and December 2020.

On the resumption of elective services in July, outpatient services became a hybrid of virtual and physical appointments. Patients were only seen physically if deemed essential by clinical staff. In the Outpatient Physiotherapy Department, 1,141 referrals were received; 568 for postoperative review. Of these, 28% of all appointments were managed virtually.

Between March and December 2020, 204 patients following Total Knee Replacement Surgery were referred for physiotherapy. Of these 83% (n = 169) were managed via virtual appointments with successful outcomes. 65 patients following trauma to the wrist, hand or fingers were followed up in Hand Therapy.

Paediatric Service

Activity within the Paediatric Service continued to increase during 2020 despite Covid-19. Seventy three patients were managed through the limb reconstruction service under the expertise of Clinical Specialist Physiotherapist Elizabeth Meleady. Fifty six of these patients were new to the service with 17 being review patients. The total number of physiotherapy sessions were 726, with 7% of these being delivered virtually during the year.
In addition, 48 patients were assessed and treated. The average number of sessions per patient was 6. At the end of 2020, funding was secured for a Senior Physiotherapist and Senior Occupational Therapist to this service commencing Q1 2021.

Clinical Specialist Physiotherapist-led services

The clinical specialist-led MSK Triage clinics support Consultant Orthopaedic Surgeons in managing their Outpatient waiting lists. During 2020, this service assessed 1,282 new patients.

In Q4, 2020, MSK Triage collaborated with the NTPF on two initiatives:

NOHC Long Waiters
Patients waiting 6 months or longer for their initial appointment

Spinal	**237**
Upper limb	**137**
Lower limb	**168**
Total	**542**

MMUH Long Waiters
Patients waiting 6 months or longer for their initial appointment

Total **431**
These were all lower limb patients under the clinical governance of Mr Cashman

Service improvements 2020:

Prior to Covid-19, the physiotherapy outpatient department commenced a quality improvement project, to facilitate further growth, development and create value for the service and organisation. Results from this QIP are expected to be fully implemented in 2021 once activity returns to pre-Covid-19 levels.

Medical Social Work

2020 highlights

Referrals to Medical Social Work
909

Orthopaedic patients
746

Patients of the Specialist Rehabilitation Unit
164

During 2020, the Medical Social Work (MSW) team provided essential support for patients, their families, and staff members, helping them through the most challenging times.

Although bed capacity and activity in the Hospital reduced during the lockdown and beyond, demand for MSW supports rose in response to Covid-19 related stresses at the Hospital and in the wider community.

Hospital
The team received a high volume of calls from distressed patients fearful of attending hospital appointments and undergoing surgery during the pandemic. They also assisted patients whose surgeries were cancelled, providing practical advice and emotional support.

Virtual visitation
In March 2020, viral proliferation imposed visitor restrictions. The cancellation of non-essential elective surgery and outpatient appointments heightened patient anxiety. During this time, the MSW team facilitated virtual visitations, helping patients to communicate with families and loved ones on computer tablets using social platforms. The team also coordinated special in-person visitations on compassionate grounds.

Virtual family care meetings
As visitors were not permitted onsite, family care plan meetings were held online or over the phone to ensure family involvement in the patient journey and discharge planning process.

Discharge planning
The treatment of trauma patients is not conducive to advance discharge planning. Therefore, the MSW team was called upon to provide agile discharge planning and support for patients, liaising with families and community resources to ensure the continuum of care following patient discharge.

Coordinating community resources
In March 2020, the Caritas Convalescent Centre ceased operations, reducing post-discharge convalescent care options. As viral infection spread, hospitals provided essential care for acute patients, postponing elective surgical procedures in anticipation of a surge in Covid-19 cases. In addition, hospitals employed early discharge practices to protect patients and staff and optimise bed capacity, increasing demand for community services. The MSW team undertook complex discharge planning as pressures mounted on community supports.

Suicide prevention

MSW and Psychology played a vital role in suicide prevention during the year. 2020 saw the development of a hospital-wide Suicide Prevention Policy. We provided staff with detailed processes and flow charts guiding the response to the threat of suicide for inpatients, outpatients, family member's, and staff/colleagues. In addition, the MSW Department arranged HSE SAFEtalk suicide prevention training for staff early in 2020, before the onset of the pandemic.

Suicide management falls under the remit of the Safeguarding Committee. All referrals, training needs, policies and procedures are reviewed and monitored by the Safeguarding Committee.

Psychological first aid
MSW and Psychology offered individual and group support sessions to staff during the year to alleviate Covid-19 induced stresses and pressures. In addition, managers and supervisors received psychological first aid training, empowering them to support teams on the frontline.

World Mental Health Day
On 8th October, MSW disseminated information to staff reflecting on a challenging year and raising awareness of the development of the Suicide Prevention Policy with Psychology in 2020.

Brain Injury Support Day
MSW facilitated a Brain Injury Support Day for family members of patients that suffered an acute brain injury for current and past neuro-rehab patients. Held on the 6th March 2020, this was a successful day, greatly appreciated by carers and family members who received emotional support and information in a group format.

Supporting children

Cappagh Kids

In 2020, MSW provided a full spectrum of services, including child protection, emotional and mental support, financial and welfare support, advice and advocacy; and discharge planning assistance. In addition, the team connected families with community services, assisting patients living remotely and those participating in long term limb reconstruction programmes by providing medical transport services. The team also monitored and investigated several "Do Not Attend" incidences for Child Safety.

From May to December 2020, MSW had 52 paediatric referrals, and we expect demand for MSW interventions to increase in line with paediatric service expansion at the Hospital. To this end, MSW is in consultation with the Paediatric team to determine future supports and decide if a dedicated MSW paediatric liaison is needed.

Children First

MSW facilitated an information briefing session from the Children First National Office, Training and Development Officer to members of the IEHG on the coordination and completion of the Children First Risk Assessment and Safeguarding Statement. The event was attended by representatives from Medical Social Work, Quality and Safety and Nursing departments from hospitals across the IEHG.

Adult safeguarding

HIQA and the Mental Health Commission (MHC) have jointly developed National Standards for Adult Safeguarding. The National Standards allow for a consistent approach to preventing and responding to harm if it does occur. In addition, MSW, Quality, Nursing and Therapy Services, a subcommittee of the Safeguarding Committee, has reviewed NOHC compliance, and a gap analysis is underway.



National Bone Bank

2020 highlights

Femoral heads harvested **144**

Structural allografts imported **128**

The National Bone Bank (Tissue Establishment) is Ireland's bone retrieval and banking service. Headquartered at the National Orthopaedic Hospital Cappagh, the National Bone Bank has two satellite banks at Croom Orthopaedic Hospital, Co. Limerick and Our Lady's Hospital, Navan. The service was established in 1996 to meet the national demand for fresh-frozen femoral head allograft for use in surgical procedures.

Working to stringent Service Level Agreements, the National Bone Bank supplies fresh-frozen femoral head allograft to hospitals and healthcare facilities across the state under license by the Health Products Regulatory Authority (HPRA). The license is renewable biannually following an onsite inspection by an HPRA team, and the next inspection will take place in November 2021.

Each bank harvests fresh-frozen femoral head allograft for use onsite, and surplus stocks are transported to the site at NOHC for storage and distribution as required. As Ireland cannot harvest the structural allograft used in complex reconstruction surgery, the bank at NOHC imports products under license from the US Tissue Banking Service.

Bank activity was interrupted during the year by the Covid-19 pandemic, and satellite sites ceasing activity for a time. Activity at NOHC was reduced, and femoral head harvesting was temporarily suspended from March to May.

Surgical bone donation and utilisation

A total of 144 femoral head allografts were retrieved during 2020. Of these, 129 were used and 12 were deemed unsuitable for use. The National Bone Bank continued to utilise femoral head allograft supplied by Our Lady's Hospital, Navan during this time and to meet national demand for 2020. Bank activity at the Croom Hospital bank was suspended in September 2018 due to staffing issues and remained in suspension for 2019. New staff appointed are undergoing training, and we hope to resume services at Croom in 2021.

Structural allograft

A year-on-year increase in demand for structural allograft continues, and 128 products were imported from the US Tissue Banking Service during 2020 for distribution to public and private hospitals nationwide.

The National Bone Bank Service (Tissue Establishment) is incredibly grateful to donors for voluntarily making allograft available for use to benefit patients undergoing orthopaedic procedures across the state.



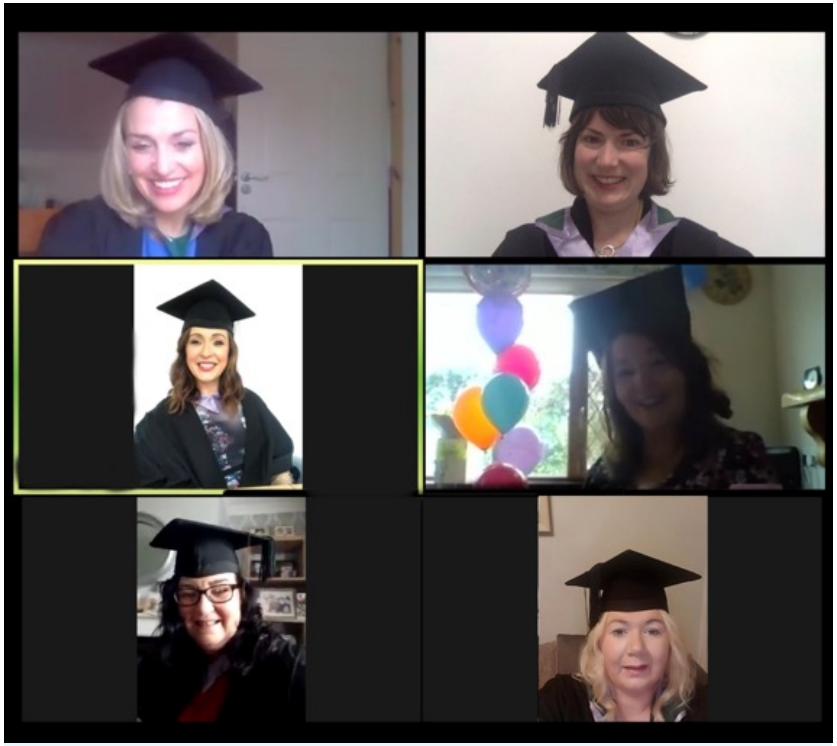
Casting Education Centre

In-person training and education were provided to nurses and doctors from around the country until the first Covid-19 lockdown in March 2020. Day courses were successful in delivering practical teaching for staff tasked with treating orthopaedic conditions.

In August 2021, the Certificate Programme concluded with exams. In November, the second class to complete the Professional Certificate in Musculoskeletal Casting and Splinting (Adults & Children) graduated from the Royal College of Surgeons in Ireland (RCSI). It was a proud day for the National Orthopaedic Hospital Cappagh and a special day for the students who completed the programme despite the added stress of Covid-19. Although virtual, the graduation day was a fitting celebration of the student's hard work, and we congratulate the participants and supporting hospitals.

The programme's success is reliant on input from many departments at the Hospital. We are grateful to everyone for contributing to the delivery of best-in-class casting and splinting education.





Class of 2019/20 – Virtual graduation



Suzanne Donnelly, CHI Crumlin, graduating with Professional Certificate in Casting & Splinting (ICC)



Leanne McAteer, SVUH, graduating with Professional Certificate in Casting & Splinting (ICC)

Medical & Surgical Education

The Department of Orthopaedic Surgery continued to provide undergraduate musculoskeletal (MSK) teaching and clinical attachments for Intermediate Cycle 3 and graduate entry medical students between January and early March 2020.

Core teaching days in the first week of January and the third week of February 2020 were well received. We are grateful to all the Consultant Orthopaedic Surgeons at Beaumont, Mater, NOHC and Crumlin hospitals and the Department of General Practice in RCSI for their contribution to the successful delivery of this programme.

Staff

Professor and Head of Department
Professor John M. O'Byrne, MCh, FRCSI, FRCS(Orth), FFSEM, FFSEM(UK)

Administration
Ursula Gormally, BA(Hons), HDip(Risk), Dip(HSA)

Lecturers (July 2019 – January 2020)

Dr Adanna Welch-Phillips, MCh, MRCS
Dr Katherine Lydon, MB, BCh, BAO, BSc
Dr John Waldron, MB, BCh, MRCS
Dr Richard Downey, MB, BCh, BAO, MRCS

Lecturers (January 2020 – July 2021)

Dr Rossa Devlin
Dr Cliona NicGabhann
Dr Mihai Rotaru
Dr Richard Downey

Early 2020

The academic year got underway in a typical fashion. In the days after New Year, we presented a week of Core Musculoskeletal medicine to all IC3 undergraduate students at RCSI – in the Robert Adams auditorium and break-out suite of rooms in the first week of January and the third week of March. The new suite of break-out and lecture rooms in the RCSI Education and Research Centre in Beaumont Hospital was pleasant for students, lecturers, and the floor model actors who came each afternoon to assist with clinical scenarios and examination techniques.

We are grateful for the excellent assistance of the outgoing Head of RCSI's IC3 clinical year - Professor Alice Stanton, and her team, particularly Mrs Laura Irrazabal.

Covid-19 and Musculoskeletal Undergraduate Teaching

In the second week of January 2020, the RCSI IC3 students commenced onsite clinical medicine attachments at NOHC. Students were assigned to a variety of different clinical sites and received relevant tutorials from our lecture staff.

Our lecturer team also facilitated the final clinical year's students at both RCSI and UCD with a series of revision musculoskeletal lectures appropriate to the preparation of their final clinical OSCEs.

In early March 2020, it was becoming apparent that Covid-19 posed a significant risk to public health. The Department in consultation with the Hospital's leadership team, and following Government recommendations, agreed to suspend education and reserach services. Shortly after that, the Government recommended that all but essential workers remain at home, and the Hospital suspended the onsite teaching of medical students. Almost simultaneously, UCD and RCSI announced the suspension of onsite activities for medical students.

Change in didactic teaching

To minimise the effect on students, the colleges asked teaching units to convert lectures to online, live, didactic sessions or pre-recorded lectures.

Under the direction of Professor O'Byrne, our lecturers undertook the videoing of a suite of didactic lectures on core subjects, and uploaded them to the Blackboard Student Portal for UCD students. A further upgrade was subsequently loaded to the RCSI's MOODLE portal. Students could log into their lectures at any hour, and at the end of sessions, they were encouraged to send questions to the lecturers, who presented a live tutorial session responding to questions raised. Thus, throughout the pandemic, communications improved. The universities' stated policy is that much of the future undergraduate core didactic lectures will be delivered as pre-recorded packages, with live tutorials and feedback.

Clinical teaching

At the height of the pandemic, a vital component of the MSK module, clinical examination techniques, could not be undertaken on NOHC's Campus. Instead, lecutrers narrated video library footage of clinical examination techniques. Unfortunately, stock library videos were not always suitable, and our lecturers, led by Dr Mihai Rotaru, are creating a suite of bespoke NOHC examination technique videos. Lecturers examined consenting patients and narrated the methodology of the clinical examination technique. This project is ongoing, and patient anonymity is respected.

Development of the Department of Orthopaedic Surgery Education Centre

In 2020, construction of the new Education Department commenced and works were disrupted during the first lockdown. The Department's current suite of offices will reassign to the NOHC laboratory, which is undergoing a significant expansion in response to increased demand for services.

Undergraduate awards

Abraham Colles Medal 2020.

As only 80 of the IC3 medical students completed either MCQ or the subsequent OSCE before RCSI's shutdown in March 2020, all IC3 students were invited to submit an essay on "Covid-19 and Orthopaedic Surgery" for consideration for the award of the Abraham Colles Medal 2020.

We received 14 submissions, and the winner was chosen by a range of Consultants based at NOHC, our lecturers, and Mr Eoin Sheehan, Head of Training with the Irish Institute of Trauma and Orthopaedic Surgery (IITOS). Congratulations to Ms Emily Kendell, who was presented with the Abraham Colles Medal at RCSI's virtual conferrings in November 2020. Emily's name has been added to the eponymous Medal Board in RCSI, at 123, St Stephen's Green.

The National Orthopaedic Literary Award (NOLA) 2020

We invited undergraduate medical schools in clinical years of study to submit a work of fiction with an orthopaedic theme of 2000 words or less for the NOLA 2020 Award. Again, all undergraduate medical schools were represented in the submissions which were received.

A team of supporters of the NOLA reviewed all entries and shortlisted the top three scoring short stories. These stories were then sent on to Irish International Bestselling Author Roddy Doyle for final adjudication.

The winning short story, entitled "Faded Denim", was submitted by Ms Aisling O'Byrne, clinical years undergraduate medical student at Trinity College Dublin. Roddy said of her short story:

"An astonishing, shattering, brilliant story, told with great skill and discipline and with a rhythm and pace that seem perfect. A timeless fear, dropped into the present moment: I've been reading a lot of short stories since the start of the first lockdown, and this is one of the best I've read." - Roddy Doyle

Ms O'Byrne was presented with her cash prize by Mr Tom McCarthy, Consultant Orthopaedic Surgeon at St. James's Hospital and Institute member, and Ms Amanda Wilkinson, Institute Secretariat at RCSI.

Research

The Covid-19 pandemic provided many opportunities for original research. Professor O'Byrne and Professor O'Shea of RCSI were fortunate to obtain a research grant from Science Foundation Ireland on surgical masks. Our lecturers undertook various roles in this research which was carried out in conjunction with NOHC and the CDU Department.



Nurse Education

2020 highlights

Successful delivery of in-service education | Adaptation of academic courses for digital platforms

The Nurse Education Department at NOHC delivered a diverse educational programme in 2020, and we would like to commend all those who combined working on the frontline and academic studies during an exceptionally challenging year. Courses traditionally delivered in-person were adapted for online learning to facilitate remote student access.

Postgraduate Diploma in Nursing (Orthopaedic Nursing)

Six Registered General Nurses (RGNs) were awarded a Postgraduate Diploma in Nursing (Orthopaedic Nursing) in November 2020 from NOHC School of Nursing and Midwifery, Royal College of Surgeons in Ireland (RCSI) and National University of Ireland.

Congratulations to Michael Sampayan (NOHC), Jose Silvester (NOHC); Colin Harrington (Midland Regional Hospital Tullamore), Sheilah O'Riordan (Kerry University Hospital); Aisling Bailey (Galway University Hospital) and Anne Marie Daly (University Hospital Waterford).

Sinead Healy (Kerry University Hospital) and Annmarie Delaney (Our Lady's Children's Hospital Crumlin) completed the Postgraduate Diploma in Nursing during the year, and Margaret Cotter (Bons Secours Hospital Tralee, Kerry) undertook two standalone modules.

New programme entrants

One RGN commenced the Postgraduate Diploma in Nursing (Orthopaedic Nursing) programme in January 2020 at NOHC, and a further eleven began the programme in September 2020. All candidates hail from external hospitals.

Postgraduate Certificate in Nursing (Orthopaedic Nursing)

We wish to congratulate Natalie Mahon (NOHC), Grace Flahive (Cork University Hospital) and Angela O'Brien (Croom), who were awarded a Postgraduate Certificate in Nursing (Orthopaedic Nursing) in 2020. Natalie Mahon received the 'Catherine Cummins' medal, awarded to the registered nurse who received an average mark of over 60% in their academic work for the three specialist modules in orthopaedic nursing.

22nd National Nurses Orthopaedic Conference

The 22nd National Nurses Orthopaedic Conference due to take place in April 2020 was rescheduled to October 2020 and subsequently cancelled due to the public health crisis. We hope to resume this event in 2022.

IEHG Nursing Symposium

The IEHG 5th nursing symposium scheduled for May of 2020 was also postponed and it is hoped that this event will be held in 2022.

Other educational activities

Several in-service events due to take place from March to May 2020 were held later in the year in conformance with updated infection prevention and control measures. These included:

- Basic life support training sessions for all clinical staff
- Early warning score sessions
- Sepsis management
- Anaphylaxis training
- Enabling and enhancing the care of a patient with dementia
- Final journeys
- Epidural use
- Sub-cut fluids administration
- Medication management
- In-house preceptorship (5-year update)
- Planning other in-service training sessions specific to care of the older person and orthopaedics
- Anterior Cruciate Ligament (ACL)
- Primary Lateral Sclerosis (PLS)

Staff also attended Automated External Defibrillator (AED) updates, Haemovigilance training (delivered by Orla Dowdall, Haemovigilance Officer) and Paediatric Early Warning Scores (PEWS) training (Bairbre Webb, Paediatric CNSp).

An educational bulletin is circulated monthly with information on conferences, external educational events and Continuing Professsional Development (CPD) articles with an academic calendar delivered quarterly.

Representing the NOHC Nurse Education

The nurse education leads represented the Hospital on a number of internal and external committees including the Steering Committee in the School of Nursing, RCSI (a forum for discussion on postgraduate programmes), IEHG practice development group, NMPDU education centre meetings and the Nursing and Midwife Planning and Development Unit (NMPDU) practice development forum. Many of these forums are now accessible virtually.

Practice development

We continue to review and develop nursing policies in conjunction with our nursing administration colleagues.

Education opportunities

We would like to commend members of the nursing staff who successfully completed external educational programmes during the year.

International Orthopaedic Nurses Day

International Orthopaedic Nurses Day is celebrated annually in October. The Hospital marked the day with a presentation to staff, prize draw and a canteen quiz on historical nursing figures.

International Year of the Nurse

2020 was designated International Year of the Nurse by the WHO to recognise the profession's contribution to healthcare. In celebration, we held a number of events to mark Orthopaedic Nurses Day and towards the latter half of the year, we asked staff in the hospital (nursing and non-nursing) to nominate a nursing colleague who went above and beyond their role in caring for patients and colleagues. Catherine Prendiville (RGN St. Teresa's) won the inaugural event for September, with Caroline Kilcoyne (CNM St. Anthony's) winning in October. Jane Hernandez (RN HDU) won the nomination for November, with Margaret Cavanagh receiving her token in December. This event finished in February 2021.









Research & Ethics Committee

2020 highlights

Research applications submitted **30** | Research applications approved **27** | Increase in Joint Register Reviews **7%**

Research & Ethics Committee

The Hospital has an excellent reputation for research and academic excellence. Students from disparate disciplines are encouraged to think beyond the treatments and practices of today and redefine the future of medicine for improved patients outcomes. In 2020, the Research & Ethics Committee convened on five occasions to review 30 applications submitted during the year. A total of 27 of the applications submitted were approved.

Irish National Orthopaedic Register (INOR)

In 2020, there was a 7% increase in INOR and Cappagh Joint Register attendances. In-person appointments were held in January and February and online after that via virtual clinic platforms. Patients x-rays were scheduled in advance of review consultations, and the Radiology Department opened on Saturdays to facilitate physical distancing and ensure the safe care of patients.

INOR Reviews in numbers

2020	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
6-month review	134	131	189	197	160	173	92	92	135	61	54	47	1482
2-year review	9	10	10	6	10	4	25	25	28	24	16	8	175
5-year review	99	87	50	98	136	109	167	155	205	109	55	14	1284
10-year review	165	174	208	110	43	95	123	99	124	220	97	64	1522
15-year review	-	2	3	2	2	1	65	0	0	14	101	1	234
Total	**407**	**404**	**450**	**863**	**341**	**723**	**472**	**371**	**492**	**428**	**323**	**134**	**4,697**

Human Resources

2020 highlights

Staff retention 5+ years **53%** | Staff retention 10+ years **40%** | Staff retention 15+ years **21%** | Staff retention 20+ years **13%**

Resourcing proved to be a significant challenge during 2020. Absenteeism arising from infection and close contact highlighted gaps in the Hospital's ability to perform critical tasks. A gap analysis was undertaken, and agile upskilling provided to ensure quality patient care. We redeployed frontline staff deemed to be "at-risk", and undertook creative and agile resourcing to ensure all departments were appropriately staffed despite absenteeism. The Hospital relied on agency staff for the provision of services, and several retired staff returned to assist our efforts during the height of the pandemic. We are incredibly grateful to them for their courage and commitment to patient care.

Space at NOHC is at a premium, and administrative staff at the Hospital work in close quarters. Unable to satisfy physical distancing directives, some of the administrative staff were requested to work from home. HR worked closely with IT to arrange laptops and system access and ensure personnel remained connected from afar.

HR collaborated with Occupational Health to ensure the wellness of staff returning to work, minimising the risks associated with a premature return to work.

Resourcing will continue to challenge the HR department as staff retention and recruitment become increasingly difficult in the Covid-19 climate. We are fortunate to have a unique and positive culture and an exceptional retention rate at NOHC. We value our people and remain committed to empowering them through education and development. NOHC is an equal opportunities employer. We are confident our strong cultural values will enable us to compete against private hospitals to secure the best talent.

Staff number
497

Years of service

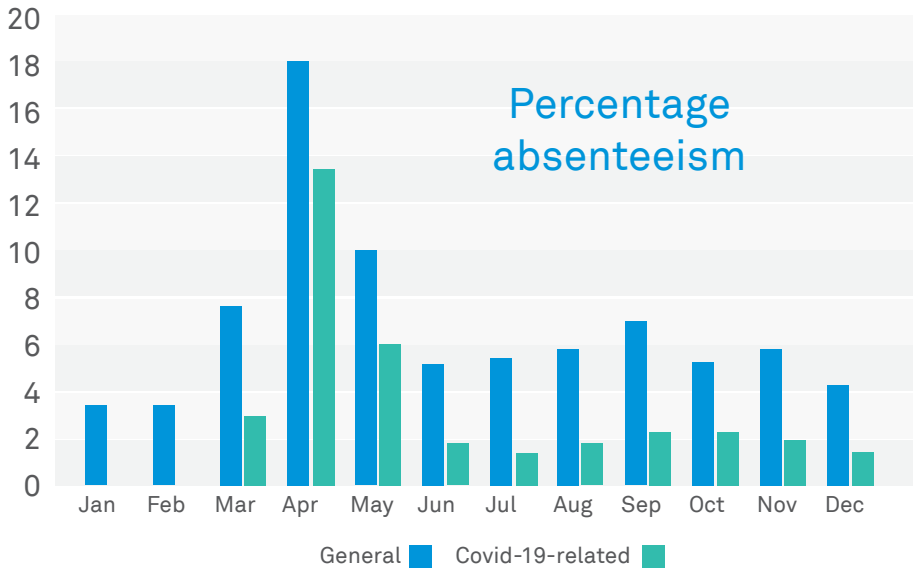
0-5 years	235
5-10 years	65
10-15 years	94
15-20 years	40
20+ years	63

Gender profile

Female	82%
Male	18%

Age demographic

18-35	98
35-55	283
55+	116



Catering Services

2020 highlights

Successful implementation of rapid changes to ensure continuity of service across multiple locations

The year began like any other but as March approached, the threat of Covid-19 loomed large and the Hospital experienced its first Covid-19 positive case. The Catering service implemented rapid changes, adopting a split team arrangement with no overlap to protect staff, prevent intra-hospital infection transmission and ensure service continuity.

Restaurant service

In 2020, the Catering Service Team played a crucial role in fueling frontline workers to meet the challenges presented by Covid-19. Restaurant capacity reduced in conformance with public health guidelines, and additional spaces across the Hospital were repurposed as staff dining areas to facilitate the segregation of theatre teams. Working across different locations proved challenging for the service.

Recognising the enormous efforts of our dedicated staff during the lockdown period, the Hospital experienced a tidal wave of goodwill and generosity as suppliers gifted produce to the staff at the Hospital. The Hospital is very appreciative of that support and goodwill.

Patient service

Although inpatient numbers at the Hospital decreased during 2020, the Catering Service Team worked hard to overcome absenteeism challenges and deliver an uninterrupted food service. Four-week cycle menus simplified the food ordering and preparation process and improved the food variety for patients with a longer length of stay.

It is customary for patients in residence to celebrate Christmas dinner in the restaurant on December 25th. Sadly, a restaurant meal was not possible this year, and patients celebrated Christmas dinner in the safety of the wards. Staff on duty went to extraordinary efforts to infuse the day with festive cheer for the patients in their care.

Infrastructural changes

During the year, the NOHC Green Energy Committee lighting upgrade programme, in collaboration with the HSE and SEAI, replaced the catering light fittings with energy-efficient sensor lights.

Service innovations

In 2020, work began on implementing a Dualtron digital food ordering system for patients, which is set to launch in 2021.



Facilities

2020 highlights

Opening of the new Admissions Building | Significant progress towards the completion of the Convent House Refurbishment

2020 was an eventful year for the Facilities Department. As the year began, the Hospital rebrand and construction works for the new Admissions building and architectural plans for the Cappagh Kids' Outpatient Clinic were progressing at pace. Then Covid-19 struck, highlighting many infrastructural shortcomings at the Hospital.

Working in collaboration with the Executive Management Team, Medical Board and Clinical Staff, the Facilities Department had to rethink common areas, changing rooms and dining spaces for the safety of all. Temporary pods were installed in waiting areas, and space was repurposed for isolation rooms and additional office space. In addition, modular buildings were introduced to facilitate physical distancing and team segregation, and temporary signage installations guided patients to designated parking bays for Covid-testing, triage and clinic appointments.

Ongoing works

Works on infrastructural projects continued, albeit at a slower pace. Lockdown limited the supply of certain goods, and work was halted for a time. The redevelopment of the main Convent House building continues, and it is expected the Cappagh Kids Outpatient Department Clinic will open in late October 2021. The Professorial Unit will also relocate to the Convent House Building, and the Laboratory will assume the vacated space in accordance with expansion plans.

Electrical Infrastructure Review

Following a competitive procurement process, an external consultant was appointed to review the Hospital Campus Electrical infrastructure. Initial findings confirmed the maximum import capacity is insufficient to meet future demand. An application was submitted to ESB Networks to upgrade the existing low voltage connection to support the increased energy demands of the new radiological equipment and infrastructural projects.

Future works

The Facilities Team ordered a two-storey modular building that will deliver increased office space and staff dining areas.

Radiology Department

- Works on the general x-ray room refurbishment and equipment upgrade were finalised in Q4 2020, for commencement in Q1, 2021.
- Enabling works to install the MRI 1.5T upgrade and new CT scanner are set to begin in Q2 2021.
- A new waiting area, staff changing facilities and toilets were designed, and works are expected to begin in late Q2 2021.

Design and planning

Theatre changing and welfare facilities

Short-term theatre changing and welfare facilities were introduced during the pandemic. We plan to work with architectural contractors to devise appropriate plans for a long-term solution.

Conversion of St. Paul's Gym to a 4-bed ward

An architectural firm was appointed to prepare plans for the conversion of St. Paul's Gym into a 4-bed inpatient ward.

Additional Car Parking

We commissioned a design team to deliver plans for 50/60 additional staff car-parking spaces on campus.

Infrastructural ambitions

The NOHC occupies a 30-acre campus prime for development. Located close to the M50 and national arterial routes, the Hospital has ambitious plans to create a new High Dependency Unit and ward block and introduce additional surgical theatres onsite. Plans were submitted to the HSE in Q4 2020 for discussion in January 2021.



Mr Connor Green, Consultant Orthopaedic Surgeon discusses Cappagh Kids construction project with Rory O'Brien

Healthy Ireland

Healthy Ireland (HI) is the national framework for action, to improve the health and well-being of the population of Ireland over the coming generation. The Healthy Ireland committee actively champions initiatives to promote health and well-being at the National Orthopaedic Hospital Cappagh.

In January 2020, Vicky Doyle, HSE Health Promotion Officer for CH09, came on-site to facilitate a 1-day training course titled "Minding your Well-being". This course was well-received by all participants, and a series of 5 videos were subsequently hosted online and accessible to all during the pandemic.



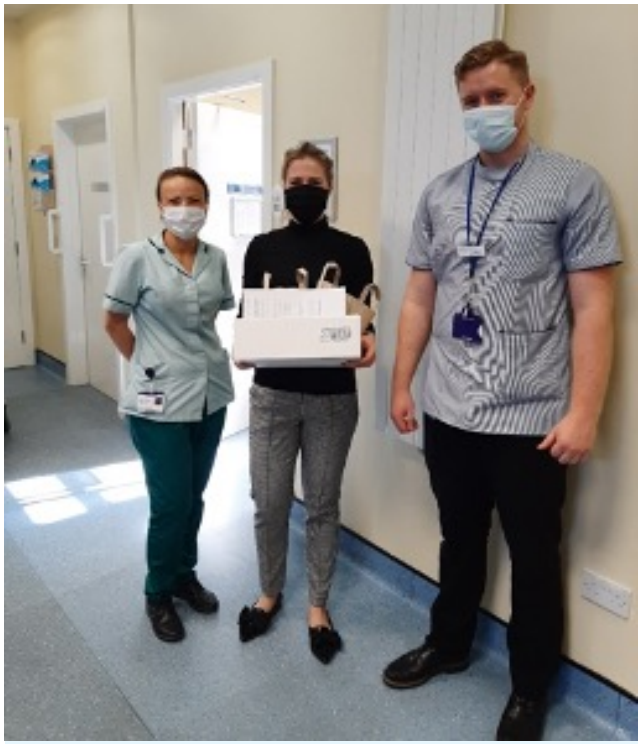
Throughout the pandemic, Healthy Ireland embraced a multi-channel approach to information sharing, disseminating health and wellbeing content via email, mobile, notice boards and video messaging.

On the 10th October 2020, to celebrate World Mental Health Day, the HI Steering Committee, in collaboration with catering and local suppliers, gifted a "goody box" to all departments. At the same time, we surveyed frontline staff, analysing how they managed their well-being during these challenging and changing times. Forty-seven employees (13.5%) completed the survey.
Key findings included:

- The importance of days off/annual leave for all employees for exercise, meditation and family time.
- Hobbies play a significant role in stress management.
- Staff indicated a preference for the informal support of family, friends and colleagues over formal supports such as Employee Assistance Programmes.



L-R: Jacqui Given, ATSM, Josh Mills Kelly, Rehab Assistant, Anna Szarata, OT Assistant, Dr Sarah Buchanan Clinical Psychologist



L-R: Anna Szarata, OT Assistant, Jacqui Given, ATSM and Josh Mills Kelly, Rehab Assistant

IT Services

2020 highlights

Delivered a remote working solution for administrative staff

Introduced new digital procedures to support trauma services and plastic surgery

Improved connectivity and communications capability

2020 was an exceptionally busy year for the IT Department. In the early part of the year, NOHC was one of three sites nominated by the IEHG to pilot a Healthcare logic data analytics solution for the Health Service Executive (HSE). We welcomed Paul Reid, CEO of the HSE, to the Hospital to witness the proof of concept. Recognising the benefits this platform will deliver for hospitals nationwide, the HSE has signed a 2-year contract and intend to roll out the Health Performance Visualisation Platform nationally. We are delighted to confirm that NOHC is the designated first adopter of this platform.



The onset of Covid-19 and the need for physical distancing accelerated operational digitisation at the Hospital and highlighted a spatial deficit. In-person meetings transitioned to online forums, and medical consultations migrated to virtual platforms. The IT Department provided an agile response to the sudden demand for changing working arrangements acquiring new laptops, printers, scanners, tablets, LCD screens, docking stations and software licences. They installed device hardware and undertook works to improve VPN connectivity, stability and network security. New headsets and webcams were acquired to facilitate the transition to virtual meetings, and staff received training on their use. We also provided hospital-wide Covid contingency planning.

As the majority of administrative staff continued working on site, the IT Department assisted their relocation for social distancing purposes. WiFi coverage was enhanced across the Hospital to enable virtual communications.

To prevent the spread of Covid-19, in-person meetings were supplanted by video conferencing. The IT Department initiated an upgrade of the auditorium conferencing facilities, including installing ceiling mics for the detection of high definition speech from multiple locations and a sophisticated audio processor for input management. Microsoft Teams licences were purchased to facilitate board, staff and external meetings and clinical collaboration.

As the Hospital transitioned to trauma services and extended its services to include plastic surgery, IT provided significant technical support for procedural changes. In addition, considerable work was undertaken to establish and enhance Paediatric Nursing Clinic, Pre Screening Clinic and Library IT system infrastructure and the lab application and database server was migrated to a new host.

The IT Department will continue to augment current systems and explore new systems for improved communications and secure operations.

Financial Reports

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Statement of Income and Retained Earnings
for the Financial year ended 31st December 2020

	2020 €'000	2019 €'000
TURNOVER		
Revenue grants (HSE)	**42,314**	38,693
Active Rehabilitation Unit (HSE)	**2,677**	2,668
Patient income	**8,736**	8,496
Other income	**2,778**	3,273
Capital grant amortisation	**982**	840
	57,487	53,970
COSTS		
Staff costs	**(34,731)**	(31,936)
Non-pay costs	**(21,496)**	(20,619)
Depreciation	**(1,305)**	(1,244)
	(57,532)	(53,799)
Operating (deficit)/surplus	**(45)**	171
Exceptional item	**-**	-
Interest payable and similar charges	**(16)**	(19)
(Deficit)/Surplus on ordinary activities before taxation	**(61)**	152
Taxation	**-**	-
(Deficit)/Surplus on ordinary activities after taxation	**(61)**	152
Retained earnings at the beginning of the reporting period	**855**	703
Retained earnings at the end of the reporting period	**794**	855

Balance Sheet as at 31st December 2020

	2020 €'000	2019 €'000
FIXED ASSETS		
Tangible assets	**15,335**	14,920
CURRENT ASSETS		
Stocks	**635**	730
Debtors	**9,448**	6,031
Cash at bank and in hand	**3,500**	4,602
	13,583	11,363
CREDITORS: Amounts falling due within one year		
Creditors	**(9,568)**	(8,323)
NET CURRENT ASSETS	**4,015**	3,040
TOTAL ASSETS LESS CURRENT LIABILITIES	**19,350**	17,960
CAPITAL GRANTS	**(18,527)**	(17,076)
NET ASSETS	**823**	884
Financed by:		
CAPITAL AND RESERVES		
Called up share capital presented as equity		-
Retained earnings	**794**	855
Other reserves	**29**	29
Shareholders' funds	**823**	884

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